Trade and Civilisation

Economic Networks and Cultural Ties, from Prehistory to the Early Modern Era

Edited by Kristian Kristiansen, Thomas Lindkvist, and Janken Myrdal



TRADE AND CIVILISATION

This book provides the first global analysis of the relationship between trade and civilisation from the beginning of civilisation around 3000 BC until the modern era around AD 1600. Encompassing the various networks including the Silk Road, the Indian Ocean trade, Near Eastern family traders of the Bronze Age, and the Medieval Hanseatic League, it examines the role of the individual merchant, the products of trade, the role of the state, and the technical conditions for land and sea transport that created diverging systems of trade and developed global trade networks. Trade networks, however, were not durable. The contributors discuss the establishment and decline of great trading network systems, and how they related to the expansion of civilisation, and to different forms of social and economic exploitation. Case studies focus on local conditions as well as global networks until the sixteenth century when the whole globe was connected by trade.

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PREFACE

Trade and Civilisation results from a three-step academic venture. The idea for the book originated in two Swedish interdisciplinary conferences on Global Histories held in 2011 and 2012, where a number of central research themes were identified and discussed. It inspired the three editors to propose a carefully prepared international follow-up conference on the theme of trade and civilisation that should lead to a book. The conference was held in Gothenburg in May 2013, and papers were precirculated and discussed by commentators. After that, manuscripts were revised and finalised in the light of the conference. Finally, two peer reviewers made substantial, but constructive, comments on manuscripts, leading to a final editing of the chapters before publication.

We owe our gratitude for economic support of the conference to the Swedish Riksbank Foundation, which also generously supported the initial Global History conferences. We are also grateful to the Department of Historical Studies at the University of Gothenburg, for allowing us to draw heavily on its publication services. Rich Potter did all digital work on illustrations and graphics, as well as formatting, and Sara Ellis Nilsson did the copy editing. Finally, we are grateful to the Cambridge University Press editors: Asya Graf for taking the book on board, and Beatrice Rehl for leading it on to final publication. We hope readers will find as much inspiration in reading the chapters as we did in doing the conference and writing the book.

ONE

THEORIZING TRADE AND CIVILIZATION

Kristian Kristiansen

INTRODUCTION

This chapter provides a theoretical framework for the formation of international trade and civilization during the Bronze Age after 3000 BC, while at the same time situating the various contributions within this theoretical context. The focus is thus primarily on the emergence of the constituting elements of trade, as they remained in force throughout history, and accompanied the expansion of trade and civilization. This introductory chapter thus forms a prologue to the book, while the two last chapters form the epilogue. Thomas Lindkvist and Janken Myrdal provide a global overview of trade routes as they had expanded to encompass most of the globe by the fifteenth century, while Jonathan Friedman provides a personal reflection on the historical and theoretical implications of the book, which forms a concluding statement. However, let me begin by looking back at an early contribution to our theme, as it illuminates the rate of empirical and theoretical progress.

More than forty years ago, in 1975, an influential book edited by Jeremy A. Sabloff and C. C. Lamberg-Karlovsky, *Ancient Civilization and Trade*, was published. In this book, archaeologists, social anthropologists, and ancient historians struggled to establish the nature of ancient trade, still deeply embedded in the formalist versus substantivist controversy of the economy initiated by Karl Polany (1947; Polanyi, Arensberg, and Pearson 1957) and spearheaded by Moses Finley (1973). It took several decades of research and the digging up of

new evidence, such as the Phoenician trade emporia in Iberia (Aubet 1993), as well as new interpretations of textual evidence from Anatolia, such as the Old Assyrian "Karum" trade (Gledhill and Larsen 1982), and that from Greece (Isager and Hansen 1975), to bury the theoretical illusion of a formalist versus substantivist dichotomy and the absence of private commercial trade in the ancient Near East and Greece (Ekholm and Friedman 2008: chapter 5; recent update in Morris and Manning 2005). Now, four decades later, scholars are in a position to tackle the question of the role of trade in the expansion of civilization from a new, more informed knowledge base, and with a more informed theoretical understanding of trade. In addition, answers can be expected for the questions posed about this relationship.

In the following, it is proposed that, with the rise of Bronze Age civilizations in Mesopotamia and Egypt from around 3000 BC, the early modern era begins, at least in part. From this moment on, the major institutions and technologies can be identified that were to continue and expand until the breakthrough of the modern industrial age. They included international commodity trade, the rule of public law, the rise of urban life, city-states, and sometimes empires. Therefore, the time period for this book has been set to end in around AD 1500 when a new era began. In the final chapter, Thomas Lindkvist and Janken Myrdal provide a global overview of trade routes at the dawn of this new era. During the intervening period, the book's contributors analyze, in sixteen case studies from around the world, the role trade played in the rise and expansion of civilization (as defined in the preceding text) between 3000 BC and AD 1500. Both concepts, that of trade and that of civilization, are contested. In this chapter, I will, therefore, provide a brief discussion of how the terms are employed in the book. The authors were not required to define *trade*, as it was preferable to let the case studies speak for themselves. In doing so, the heavy historical baggage of the old and now obsolete discussions of "formalist" and "substantivist" approaches in economic theory on trade were avoided (for a recent summary see Aubet 2013: part I). The goals for the book were expressed in the following text from the invitation letter to the speakers:

> One of the most enduring analytical structures of societies is the one between trade and civilization. The great ideological and religious systems tended to change simultaneously over Eurasia, and there were similar economic and demographic trends. What role did trade play in these cultural cycles? Trade is, however, not to be reduced to being identical through history. It is not an unchanging term. Instead the form and content of trade has differed. The role of the individual merchant, the role of the state and the technical conditions for land and sea transport have changed. This resulted in diverging systems of trade and in the development of global trade networks. These were not durable, and it is

of importance to discuss the establishment and decline of great trading network systems.

The two main and general themes are internal and external factors of trade in premodern societies, as outlined in the following:

1. **Internal factors**. The autonomy and institutions of trade seem to have been in place from the very beginning of civilization. The main goal is to explore these organizational structures and their development from 3000 BC to AD 1500. How do they relate to local elites who commissioned traders, and what is the historical role between bulk trade and trade in prestige goods? To what extent have these forms existed simultaneously? How do the institutions of trade relate to political power, and how far beyond the urban cores can their influence be traced?
2. **External factors**. Illuminating the role of trade in the integration of ancient world systems is key. The promotion of civilization and ideas through trade will be exemplified. Is trade a prerequisite for the making of stable political structures, or vice versa? What is the relation between trade and a predatory economy and, furthermore, between trade and war? Under what circumstances could trade networks promote the dissemination of religion, art, and ideology? An important question is also how long-distance trade affected production systems, and social and gender relations in a society.

Thus, for this project, certain structural constants in the persistent role of trade throughout history are assumed; however, it is also acknowledged that the balance of internal and external factors could vary. Therefore, whether or not recurring sets of conditions with similar effects can be identified throughout world history is of interest. The answers provided by the sixteen case studies strongly suggest that this is indeed the case.

However, there have been other constants or preconditions at work in the global expansion of trade and civilization since the rise of urban life and states during the late fourth millennium BC, some of which are addressed in the following text.

COGNITIVE GEOGRAPHIES AND TRADE NETWORKS

In order to reach an understanding of the scale and organization of ancient trading and traveling networks, at least three separate and demanding fields of research must be combined: the nature of the ancient knowledge of the world (including its cognitive maps, sometimes preserved in texts, but more often not), the nature of mobile technologies and their capacities (from ships to wagons and caravans, but also the infrastructure and logistics to support them), and, finally, archaeological and textual knowledge of the goods being

traded, as well as their origin and distribution. In addition, there is the difficult question of the quantities of goods being transported. Unifying these three realms of research demands the construction of relevant interpretative frameworks. To achieve this, it is first necessary to assemble as much comparative theoretical knowledge as possible about the role of travels, especially the kind of institutions needed to carry out long-distance trade (Kristiansen and Larsson 2005: chapter 2; Oka and Kusimba 2008).

Trade networks need agents who are motivated to travel, and who have technologies of mobility to support them and the institutions so that the institutions can provide social security (Bajamovic 2008; Kristiansen and Larsson 2005: chapter 2; Larsen 2015). All of these conditions are summarized in a mental template of cognitive geographies that makes distance and dangers, routes and destinations familiar to the traveler, and that were often preserved in mythology and oral traditions about distant geographies, from Odysseus to Pytheas (Cunliffe 2001; Dueck 2012; Duerr 2011; Fox 2008). In this way, they make the world seem smaller, as distant places become familiar, at least to the professional traveler, whether sailor, trader, tinker, warrior, or some mix of all that. Their profession is about transgressing traditional liminal borders and connecting distant places and their goods, making a profit in the process (Monroe 2011). A few citations illuminate this:

- From Malinowski (1922/1987: 298) on Kula mythology:

> Here we must try to reconstruct the influence of myth upon this vast landscape, as it colors it, gives it meaning, and transforms it into something live and familiar … I often observed how deep was their interest in sections of landscape impregnated with legendary meaning, how the elders would point and explain, the younger would gaze and wonder, while the talk was full of mythological features … Men say their true personality can only be expressed in the Kula. Kula men see their ceremonial exchange activity as their best potential avenue for immortality.

- Homer on trading and traveling, in the words of Menelaus:

> "But when it comes to men, I feel that few or none can rival me in wealth, for it took me seven years and great hardship to amass this fortune and bring it home in my ships. My travels took me to Cyprus, to Phoenicia, and to Egypt. Ethiopians, Sidonians, Erembians, I visited them all; and I saw Libya too…" (The Odyssey, Book 4, 75–85).
>
> It covers a good deal of the round-trip of the Uluburun ship, although its cargo also contained objects from faraway places such as Scandinavia (amber), Italy (flange hilted sword), the Black Sea area (stone axe scepter), and Iberia/ Cornwall (tin) (Tas and Özbirecikli 2009).

Our interpretations must strive to reconstruct the conditions that formed the basis for cognitive geographies during later prehistory and early history (Bajamovic 2011). In this respect, the Old Assyrian archives from Kanesh offer the most striking evidence of day-to-day realities for traders four thousand years ago, the role of local taxes and inns for the caravans, and also attempts to avoid taxes. According to Barjamovic:

> the trade carried out by the Assyrians inside Anatolia represents a considerably larger financial and logistic challenge. Plainly, the process of the gradual establishment and permanent upkeep of an extensive network of inns, bridges and well-kept roads, which we know marked the turning point of early medieval trade in Europe, must have had a similar precursor in Anatolia in the Middle Bronze Age. Memoranda listing the fees paid by Assyrian merchants at bridges and inns abound in the corpus, offering a compelling impression of the extensive physical infrastructure and intricate political landscape needed to support a trade of this magnitude. (Barjamovic 2008: 94)

Mercantile travels in the Mediterranean and Near East, however, were often hazardous. The Amarna letters refer to a number of incidents of traders being attacked and murdered (Bryce 2002: 89–90). In one letter, the king of Babylon, Burna-Buriyash II, complains to Akhenaten about his merchants having been murdered in Canaan by subjects of the pharaoh and demands that the perpetrators be punished. The Hittite kings also tried to encourage the authorities of the districts located on the trading routes to put greater efforts into protecting traveling merchants against crime and to assume responsibility for the merchants' safety. When they failed, they were forced to pay substantial compensation to the traders or to their families and business associates. A merchant could claim compensation for damage to his cargo or equipment as well, whether caused accidentally or through negligence. These efforts to create a legal framework for trade and to protect merchants, even if often unsuccessful, highlight the importance attached to their role in the network of international communication during the Late Bronze Age, as well as afterward. This form of communication demanded technologies of transport and institutions to support travelers and traders.

THE RISE OF MOBILE TECHNOLOGIES AND INSTITUTIONS

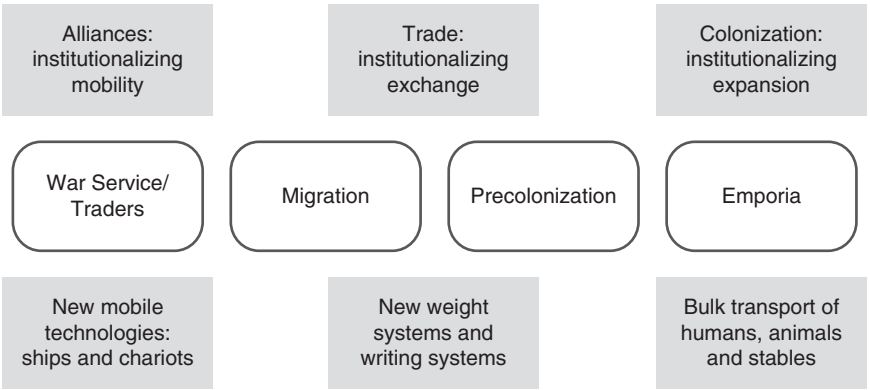
Products that were needed by all, and yet could be monopolized in one way or another are at the heart of international trade. Therefore, the beginning of international trade coincides with the rise of metallurgy and woolen textiles. The Bronze Age was a mobile world for the very simple economic reason that copper and tin, or bronze in finished or semifinished form, had to be distributed to all societies throughout the known world from a few source

areas. Systematic trade in staples such as copper and tin (Bartelheim and Stäuble 2009; Bell 2012; Shennan 1993), woolen textiles (Algaze 2005; Monroe 2009), and salt (Harding 2013; Kern et al. 2009) formed the backbone of Bronze Age economies. The control of copper and salt mines and the subsequent trade in these commodities had the same economic significance as the control of and trade in oil and gas resources have today.

During the Bronze Age, this trade was couched in political alliances where prestige goods played an important role in forging such relationships, whether in Barbarian Europe or in the Near East, as exemplified in the *Amarna Diplomacy* (Cohen and Westbrook 2000). One precondition for the operation of this economic and political system that was based on a dialectic between staple and wealth finance (Earle 2002) was the rapid development of new maritime technologies during the third and early second millennium BC, which for the first time allowed safe sea journeys over longer distances and provided larger ships that carried bulk cargoes across open waters (Broodbank 2014; Needham 2009). Likewise, the chariot symbolized a new speedy transport for warfare that had long-term historical consequences in the use and breeding of horses for transport. Pastoral societies at the peripheries of ancient states provided them with well-bred horses, as well as caravans across the steppe that connected the civilizations of eastern and western Eurasia, the beginnings of the Silk Road (Kristiansen 2011; Mair and Hickman 2014).

These technological revolutions expanded the potential for long-distance mobility and trade on a systematic basis from the beginning of the Bronze Age, as demonstrated by Toby Wilkinson in his chapter (see also Wilkinson 2014). By combining sea- and land-based journeys, new regions could suddenly be connected. In addition, the multitude of routes promoted competition. They also expanded the demands for specialists, which included shipbuilders and navigators, and constructors of wagons and trainers of horses and camels for land transport. New specialized social groups or classes, with a new institutional framework to support them, emerged, and, at the same time, these specialists expanded the cognitive geographies of Bronze Age communities by tenfold or more. The recent demonstration of the geographical knowledge that the Old Assyrian trading families mastered in order to organize and control the metal trade in Anatolia is staggering (Bajamovice 2011).

The regular connectivity between Bronze Age communities meant that knowledge could be obtained about faraway places on a regular basis. Traders were the new specialists that provided such knowledge and had the organizational skills necessary to connect distant places and their goods. In addition, warriors became widely sought after as mercenaries in the eastern Mediterranean during the Late Bronze Age, from the fifteenth century onward, as is well attested in texts and on stelae, especially in Egypt (Morkot 2007). It explains how new sword types could spread rapidly from the Mediterranean



1.1. Model of mobile Bronze Age specialists and their institutions.

to Scandinavia probably within a few years. Thus, the combination of trade in metal and, possibly, weapons, as well as traveling warrior groups and their accompanying specialists, created an interconnected, "globalized" world without historical precedent.

It was a world whose social and political complexity spanned from city-states and palace economies in the eastern Mediterranean/Near East to chiefdoms of varying degrees of complexity in the western Mediterranean and Europe (Papadimitriou and Kriga 2012; Parkinson and Galaty 2009). However, certain commonalities in social organization existed that allowed metal to flow between these communities. The question then arises: What were the social mechanisms that facilitated this flow of goods and metal? Which social categories of people could travel and for what reasons? Which institutions facilitated their travels? And, finally, which technologies supported their travels, over land and at sea?

TRADERS AND THEIR INSTITUTIONS

Figure 1.1 lists the relevant categories of people/social groups and their institutions during the Bronze Age.

The categories of people who traveled were traders and smiths, warriors and mercenaries, migrants, and diplomats. Among the examples from the Bronze Age, the Uluburun and Cape Gelidonya shipwrecks should be mentioned as examples of the maritime technology that allowed bulk trade and that also carried warriors or mercenaries to distant courts, while they protected the cargo. On the other hand, the sea-peoples exemplify migrations and colonization during the twelfth century BC, and were later followed by directed migrations during the eleventh century BC (Sandars 1978).

Agents – whether traders, mercenaries, or merchants – can only travel if routes, harbors, and institutions exist to facilitate and protect travelers. The

institutions or social processes that allowed such movements are political alliances, and linked to these were the rules of guest-friendship for merchants, emporia and colonies, and treaties and contracts. Historical examples include the Old Assyrian Karum trade to Anatolia during the nineteenth and eighteenth centuries BC, as demonstrated in Barjamovic's contribution, which presents a model followed throughout the Bronze Age (Monroe 2009), and supported by international diplomacy (Cohen and Westbrook 2000). The textually well-documented Near Eastern trade (Larsen 1987 and 2015) and the Uluburun sunken cargo (Pulak 1998) – a single unsuccessful journey out of probably dozens of similar successful annual maritime transports – exemplify the severe problems scholars face when trying to interpret the scarce material evidence of the lives of traders. This group mostly left scant archaeological evidence (Cline 2007), perhaps with the exception of their burials (van Wijngaarden 2012). In comparison with the Near East, it is justified to ask whether so-called Mycenaean pottery and settlement evidence in the western Mediterranean in Sicily and south Italy, and later, also further north in the Adriatic, are indications of small groups of private traders or families that created a form of Karum trade, embedded within local kingdoms/chiefdoms, such as the Assyrian traders in Anatolia, leaving only scant traces of their presence (Cazzella and Rechhio 2009 and 2012; Tanasi 2009; but see Blake 2008 and Jung and Mehofer 2014 for a skeptical view). This example might be called a maritime parallel to the land-based Near Eastern trade, forming a kind of precolonization (Ruiz-Galvez Priego 2008), to be followed up during the subsequent centuries by Phoenician and later Greek colonization (Celestino, Rafael, and Armada 2008), as demonstrated in Christopher Monroe's contribution.

In his article, ***Rahul Oka*** creates a model for how specialist traders and their institutions adapt to changing political and economic environments in East Asia, called the Trading System Model (TSM). It appears, however, that this model can be applied more widely. He argues, "since the Bronze Age until the 18th century CE, the trade and commerce that transpired even at a global level depended upon the adaptive resilience of hundreds and even thousands of overlapping regional trade networks maintained by trading specialists who negotiated with local elites, producers, and consumers. The overlap of these networks enabled goods, services, and peoples to travel across Afro-Eurasia." The new technologies and institutions of mobility that were in force since the Bronze Age thus created an interconnected world where long-distance travels could be carried out under relatively safe conditions, whether by traders or warriors and their companions, including women and children (Frei et al. 2015). Consequently, trade routes and resources became a new arena of conflict, leading to competition, and even wars. These were also an important element in the concept of comparative advantage.

COMPARATIVE ADVANTAGE AND REGIONAL DIVISION OF LABOR

The rule of comparative advantage, as defined by Ricardo in 1817, describes the rationality of specializing in the production of something to enter into an exchange relationship, rather than trying to be self-sufficient (Ricardo 1817). Advantage is taken of differences in environment, recourse, skill, know-how, social power, and social organization and is then transmitted into specialized labor and information in order to create a surplus (Rowlands and Ling 2013). The Ricardian model depends on a universal theory of labor as a commodity for the extraction of accumulated wealth through unequal exchange. A pure idea of commodity value would not apply in pre-capitalist contexts (nor, as many would argue, in modern capitalism) so a more polycentric value of labor must be imagined, which differs qualitatively on the basis of, for example, status, age, and gender, consistent with Marx's criticism of Aristotle's household theory of value as incapable of taking into account the value of slave labor. Unequal exchange is therefore likely to be embedded in varying social and cultural contexts through which the value of labor is filtered and transformed.

Thus, comparative advantage relates to modes of production and trade in at least two different ways. It defines the vertical relations within societies and the horizontal relations between regions. The term is useful in describing the horizontal relations of production within a regional system, regional inequality, and differentiation. The term is also useful in terms of distinguishing the nature of the specialized trade among the European regions in the Bronze Age, and relations between the center and margins. Thus, the notion of comparative advantage concretizes the total sum of social reproduction, i.e., the mode of production. As such, it is at the heart of ancient World Systems since they are based on a regional division of labor, as discussed by ***Philippe Beujard*** in his contribution to this volume. One may indeed propose that ancient World Systems represented a dominant mode of production. Thus, metal trade (in copper and tin) would be the driving force behind a Bronze Age mode of production or World System. Later Iron Age or early medieval World Systems would see other influences. The following provides an example of how it applied to Bronze Age Europe.

Simply put, a comparative advance implies that every region in Europe was able to enter the Bronze Age metal trade by providing goods that they controlled, but others needed or valued, such as amber from the Baltic, tin from Cornwall, salt and silver from the Carpathians, and wool from Hungary and the Po Delta. Thus, the Nordic region more or less stopped consuming amber with the beginning of the Bronze Age, because it was more profitable to use it in exchange for copper and tin. Consumption moved in this way to regions where amber was in the highest demand: Wessex, south Germany, and, especially, the Aegean and the Near East. It illuminates how mechanisms of value

differences worked as economic instruments of growth and wealth accumulation. Thus, the universal need for copper and tin stimulated the development of new needs and values in other fields, which in turn supported an economic division of labor in Europe. It granted some regions specific economic opportunities, but, in the long term, it stimulated every region to specialize in providing products that other regions demanded, and which, in time, would also include warriors, slaves, and horses (Earle et al. 2015). In a larger geographical perspective, Warburton has exemplified how comparative advances in terms of control over precious materials of high value such as amber, lapis lazuli, and jade played an important role in shaping the early Bronze Age international trade system or World System that connected Northern India and Central Asia with the Middle East and Europe (Warburton 2011: Figure 10.5–10.9)

During the Bronze Age, bronze – or, rather, copper and tin – made the world go round, similar to oil and gas today; every community needed bronze for their social and economic reproduction, but copper and tin would only be provided in sufficient quantities from a few large mines. Consequently, the metal trade provided a commercial base upon which other products could be added. The existence of this trade also implies that it is difficult to talk about centers and peripheries; instead, it reflects the continuous and expanding trade networks from China and India to the Mediterranean, which gradually also included Europe. In the process, previous peripheries became integrated into the system, and when some regions fell out, others were added to keep it going. However, when bronze was gradually replaced by iron as the motor in the global system during the first millennium BC much of this international trade collapsed, because iron could be provided locally in many regions. It was only later when specialized iron products and steel took over that the international commercial drive to connect all regions was re-established. This re-establishment of a global World System from the beginning of our time is the main theme of ***Philippe Beaujard's*** contribution, which summarizes part of his magnum opus, *Les mondes de l'ocean Indien*' (volume 1), from 2012.

AGENTS OF THE INTERNATIONAL TRADE NETWORKS

During the Bronze Age, vast networks of communication connected the European continent with the Eastern and Western Mediterranean, the Near East and Central Asia, transforming physical geography into social and economic geographies. Social networks consisted of interpersonal relations and diplomatic alliances, established and maintained through the exchange of extraordinary objects. Increased connectivity fostered the emergence of political alliances, treaties and the rule of guest-friendship, allowing the agents of social interaction to travel to distant places and acquire knowledge, both geographical and technological (Kristiansen and Larsson 2005, particularly

chapter 2). Based on archaeological and written sources, it can be assumed that the main categories of people who travelled during the Bronze Age were traders and merchants, smiths and craftsmen, warriors and mercenaries, migrants, and diplomats (see Figure 1.1 for a model of these agents of mobility and their institutions). Traders, smiths, and warriors in particular were at the heart of the economic system, as they fulfilled the most basic need of connected societies that required access to non-local resources and skills. Through these long-distance journeys and irreversibly linked societies, knowledge, skills, and technologies (such as metalworking, architecture, and shipbuilding) were distributed (and locally adapted) across Europe and the Eastern Mediterranean. A similar system at the margin of the southeast Asian civilization is described in ***Laura Junker's*** contribution, which also stresses the resistance of local small scale chiefdom societies to incorporation into larger ones.

Ancient texts from the Eastern Mediterranean present a very complex organization of trade and exchange in the region, ranging from state-sponsored trading expeditions to private ventures conducted by stateless middlemen and wealthy merchants such as Sinaranu *tamkaru* of Ugarit (Astour 1981; Heltzer 1988; Monroe 2011). A most illustrative example of mercantile travel in the "globalized" Bronze Age world is the Uluburun shipwreck (Bass 1991; Pulak 2001). The ship's cargo contained raw materials and finished goods from most parts of the known world, and its crew was fairly "international," as is indicated by their personal possessions but also by the tools and weapons that they used (i.e., the sets of weights that possibly belonged to four merchants, and the tools used by smiths working on board, as well as weaponry that belonged to possibly three warriors). In the Late Bronze Age, traders were also diplomats that served as emissaries and messengers, as confirmed by a letter sent to the Pharaoh in which the king of Alasiya asks: "My brother, let my messengers go promptly and safely so that I may hear my brother's greetings. These men are my merchants. My brother, let them go safely and promptly" (Moran 1992:112). There is no doubt that, in spite of constant competition, hostility, and military conflicts, all city-states were linked to each other within wide-ranging trading networks. Moreover, traders accompanied armies. Frequently, traders even traveled in advance of an army and could be an important source of information. Caesar most famously acknowledges the important role of traders, when he says that "no one, except traders, goes there [to Britain] without good reason" (*Gallic Wars,* 4. 20).

An interesting example of inter-regional integration and long-distance mobility is given by the Old Assyrian trading colonies that belonged to the city of Ashur and were located about 1200 km away from the latter, in central Anatolia (cf. Barjamovic, Hertel, and Larsen 2013; Bryce 2002). Based on tablets from Kanesh and the royal inscription, Ashur's society can be pictured as complex in composition, and largely run by a powerful group of merchants,

who sent some of their male relatives to settle in one of the Anatolian colonies in order to direct and promote the family business. Again, it can be seen how traders are able to connect regional networks to each other, to the benefit of all involved, or, in the words of Barjamovic: "Rather, a characteristic feature of the Assyrian trade appears to have been its capacity to act as a link between several Anatolian networks in a much larger interregional system of exchange" (Barjamovic 2008: 97). Insight into the complexity of the system is also gained: "The main enterprise of the Assyrian traders was to manoeuvre in this complex political landscape of mutually competing local polities in the search of profit on marketed goods. For this purpose each Assyrian company relied upon a network of agents and business associates spread out among the main cities of Anatolia, and for the most part, our written sources consist of the correspondence exchanged between the various members of such firms" (Barjamovic 2008: 95–96). Thus, Ashur and Kanesh were hubs in a series of trade networks that connected Central Asia, the Near East, and the Eastern Mediterranean. One of the mechanisms by which this was possible is the employment of shared standards of weight, seals, and currency.

TECHNOLOGIES OF TRADE AND THE CIVILIZATIONAL PROCESS

Seals and weight systems emerged with the rise of commercial trade from around 3000 BC and have been systematically mapped and analyzed by Lorenz Rahmsdorf in several fundamental works (Rahmsdorf 2005, 2010, and 2011). Sealings (*cretulae*) are the oldest, as they were found in Mesopotamia by the seventh-sixth millennium BC, and by the third millennium this practice was shared from the Aegean to India/ Indus, but now in the hands of elites (Rahmsdorf 2011: Figure 9.2). The use of sealings testifies to a need to guarantee the authenticity and quality of products, and to protect rooms for storage, in all probability linked to early forms of trade and tribute. It was only when weights and balances defining a formal system of metrology can be documented that we can link trade and sealing together, which happened during the third millennium BC, especially after 2600 BC when tin bronze came into regular use. Three different, but overlapping systems of weights and balances testify to trade between Mesopotamia and Indus, and between the Aegean Sea, Anatolia, and the eastern Mediterranean (Rahmsdorf 2010: Figure 8.5). This system of trade corresponds to the expansion of tin bronze (Rahmsdorf 2005: Figure 6) as well as writing, which, after 2000 BC, replaced the need for sealing to some extent. It was only after 2000 BC that weights and scales were adopted in Europe (Rahmsdorf 2011: 9.3).

It is interesting to note that these early systems of sealing, storage, and weight metrology had larger geographical distributions than any of the early city-states and kingdoms of the period. Traders and their trade were evidently

expanding across the boundaries of local polities, probably consisting of private trading families/houses, and, although they employed different shapes of weights in Mesopotamia and Indus, they shared basic weight units (Rahmsdorf 2011: 111). They define a "civilizational" corridor stretching from the Aegean Sea, through Anatolia to the Levant (Egypt), Mesopotamia, the Persian Gulf, Iran, and Indus (Northern India) (Rahmsdorf 2005: Figure 10). Later empires of the second millennium BC would rise on these foundations, and the further expansion of trade and colonization during the first millennium BC would form a similar foundation for the Roman Empire. In this way, an interesting cyclical long-term movement between a "heterarchical" expansion of trade and its civilizing institutions can be observed, which later leads to a "hierarchical" imperial expansion through conquest, a theme discussed in ***Peter Bang's*** contribution to this volume.

It is interesting to note from ***Timothy Earle's*** article that, in the Andean and Hawaing civilizations, regional control over production and the exchange of craft specialists is suggested to have eliminated the need for organized long distance trade and traders, which characterizes Eurasia. However, as argued by ***Alf Hornborg***, a World System eventually came into existence with trade in cosmologically loaded prestige goods as important in the initial phase. Keeping these deviating cases in mind, the following returns to the final question of how civilizational values are transmitted and shared.

THE RISKS OF TRADE – PREDICTABLE AND UNPREDICTABLE

Well-functioning trade systems demand well-ordered and safe conditions along their routes. However, warfare would from time to time cut off certain routes, but the traders would then often be able to find alternative routes. Unless warfare expanded and became long lasting the highly organized infrastructure supporting international trade would be able to absorb the effects of local wars. This is well exemplified by the Old Assyrian trade (Barjamovic, Hertel, and Larsen 2012: Map 1–3). However, warfare aimed at taking control over central hubs in the trade network, in combination with trade embargos could seriously affect trade and terminate once flourishing routes, which is what happened when the Hittites started their march towards empire. However, there were also constant risks to be calculated with, from robbers to the risks at sea to wrecking the ship. If the ship survived it was still at the risk of pirates taking over the cargo. Therefore ships like Ulu Burun had warriors on board to provide protection. All of these mostly predictable risks meant that profits had to be enormous, as evidenced from the Old Assyrian to the East Indian trade more than 3000 years later.

Some risks, however, were less predictable, and did not only affect traders and their cargos and caravans, but whole populations. They are the invisible

bacteria borne diseases that followed trade. When distant regions are connected new as well as old diseases may be transmitted along with the goods to people lacking immunity (McNeil 1998). The Black Death, caused by the bacteria *Yersinia pestis* was transmitted to Constantinople and Europe from China or India shortly after 500 AD, when it spread as the Justinian plague (Bernstein 2008: 137). It weakened the Roman Empire and spurred the onset of its decline. One fourth of Constantinople's population is thought to have died, which suggests that some form of immunity already existed. The Medieval Black Death later followed it from 1330 to 1350 AD, being brought by traders along the Silk Road (Bernstein 2008: 141), with similar devastating effects. But not all people died, which again suggests an already existing immunity among a proportion of the population, as mortality rates are 30–60 percent for Bubonic plague, this at a time when isolating people to prevent further transmission was not known.

Yersinia pestis is carried by steppe rodents, and in its developed historic form can be carried by fleas that bite humans and transmit the bacteria before they die from it. As Black Rats, and other animals carry fleas, the spread is impossible to control, as was the case with the Medieval Black Death. Recent research has now documented that pneumonic plague existed already during the fourth millennium BC in the Eurasian steppe, where it was carried by pastoralist to Siberia and northern Europe around 3000 BC causing decline of Late Neolithic populations (Allentoft et al. 2015; Rasmussen et al. 2015). Late Bronze Age populations that migrated into Central Asia during the early second millennium BC also carried the plague. Thus, we may locate the formation of immunity far back into later prehistory in some Eurasian populations. By 1000 BC the bacteria had mutated allowing it to live in the gut of the flea. (Rasmussen et al. 2015). We can therefore assume with some certainty that outbreaks of devastating, deadly diseases described in Mesopotamian sources around 2000 BC, and later in the Old Testament, could very well be the results of Yersinia pestis. And we should count the outbreak of plague as a possible factor behind the decline of populations and international trade from the very beginning of the Bronze Age.

FROM WORLD SYSTEM TO VALUE SYSTEM: NETWORKS AND THE TRANSMISSION OF VALUES AND INSTITUTIONS

A crucial question is how and why trade and traders transmitted not only goods but also values, the lifestyles linked to them, and, ultimately, new social institutions. In his last article, Andrew Sherratt presented a dynamic model of how urbanism is a machine for adding value. It happens in a complex interplay with other regions and on the margins of civilization (Sherratt 2011: Figure 2.1). Thus, to enable this civilizational "machine" to operate,

the institutions of traders, explorers, and their infrastructures, which I have discussed in the preceding text, need to be in place. Once in place, they tend to expand, in part due to the inherent economic logic of the system, in part due to the instability of such systems. The formation and incorporation of Mycenaean civilization, followed by system collapse, and then the later westward expansion of Phoenician and Greek colonies, finally culminating in the Roman Empire, are of course prime examples of such macro-historical expansion processes through the rise and fall of civilizations (Sherratt and Sherratt 1993). However, this book is primarily concerned with the role of trade and traders, and they are strangely absent from Andrew Sherratt's model. He sees the creation of new values as the key driving force in the system. In this case, a distinction should be made between prestige value, or wealth finance, and economic value or stable finance (Earle 2002). The proposal is that, from the beginning of civilization, wealth and stable finance are intertwined, and that, throughout history, the replaying of qualitatively similar processes is apparent, while they expand quantitatively. Each World System from the Bronze Age onwards saw regimes of culturally determined value systems, adopted selectively in what some would term processes of globalization (Jennings 2011), which is also the theme of ***Matthew Spriggs'*** article. In this volume, ***Warburton*** also argues convincingly that religion and value systems were indeed integrated in their early evolution. However, the underlying economic dynamics of the accumulation of capital, whether governed by silver as a monetary standard or, later, by coins, would seem to be the same throughout history. But, behind this structural sameness, there is a large degree of variation, and the question this raises is, of course, if it is legitimate to summarize such diversity into macro-historical models.

While considering this question, two competing models arise (the formalist versus substantivist controversy of our time): one that looks at structures of interaction and dominance, often within the framework of an expanding World System, and one that is more heterarchical and postcolonial looking at microhistory using a bottom-up perspective. ***Michael Galaty*** refers to this as "Mycenaean Glocalism" in his contribution. An attempt to integrate the two perspectives often refers to a scalar approach as the way forward (Earle and Kristiansen 2010: Figure 1.3), and ***Chapurukha Kusimba's*** contribution is a prime example of the integration of different scales of analysis into a multi-scalar interpretation.

Facilitating this type of research network analysis has once again come to the fore of archaeological methodologies as a means of expanding microhistories with new, powerful analytical techniques and a broader theoretical repertoire (Knappett 2011 and 2013; Malkin 2011). This theoretical wedding of agent-based materiality studied with quantitative analytical techniques may be seen as an attempt to overcome the dichotomy of macro versus micro

theories: the structural/top-down constraints of world systems theory, with its related concepts of institutionalized interaction (Kristiansen and Larsson 2005, Chapter 1), and the analytical/bottom-up constraints of personalized, agency based materiality theory of things and humans (Fahlander and Kjellström 2010; Knappett 2005 and 2011). Network analysis attempts to integrate both micro and macro perspectives into a scalar approach. This is in line with recent theoretical attempts to bridge the gap between "Big Histories and Human Lives," (which is also the title of a recent book, Robb and Pauketat 2013) with a modified social evolutionary/world systems approach (Hall, Kardulias, and Chase-Dunn 2011; Hodder 2013). Thus, the world systems approach still seems to offer a viable, if modified theoretical framework for interaction studies (Parkinson and Galaty 2009), in tandem with a new theoretical surge for comparative studies (Earle and Kristiansen 2010; Smith 2012).

In his study of the Archaic Greek expansion throughout the Mediterranean, which created a network of small and independent Greek coastal communities and city-states, Irad Malkin demonstrates how a maritime network of traders and migrant populations developed a shared Greek culture of common narratives, language, and material culture without any central government or coordination. "The emergence of all of those commonalities was a process of convergence through divergence" (Malkin 2007: 5). It is noteworthy that this process simultaneously stimulated economic growth and increased wealth among Greek city-states and their households (Morris 2005). Therefore, it is possible to profitably use the Greek – and the Phoenician – network model to interpret similar cultural expansions from the Uruk movement and onwards.

Aspects of these debates on how to integrate micro- and macro-histories are reflected in the contributions by ***Laura Junker, Michael Galaty***, and ***Christopher Monroe,*** and, to some extent, in ***Kristiansen's*** contribution, which contains an attempt to re-evaluate the role of the so-called peripheries in the Bronze Age world system. However, good examples of the transmission of new values and institutions following trade and traders are most explicitly exemplified in the articles of ***David Gaimster and Susan Whitfield***. Whitfield demonstrates how Buddhism spread along already established trade networks and institutions along the Silk Road, while Gaimster shows how the Hanseatic traders brought not only goods but also new values and the things linked to them, forming new lifestyles. Such transmissions of new values, lifestyles, and institutions helps explain the longue-durée of world systems as civilizations. Similarly, ***Mike Rowlands***, in his contribution about Africa and western Eurasia argues that, by applying a more open and flexible definition of "civilization," it is possible to define it as both unifying and diverging. The African-Indian world system cannot be understood solely in terms of the interaction between centers and peripheries, but rather as a networking of independent regions. Civilizations

and world systems become congruent in this way (see also ***Philippe Beaujard's*** chapter).

This book contributes to debates over macro- versus micro-histories, and at the core of *Trade and Civilization* is the idea that a better understanding is required of the motor of the "machine," the operation of trade and traders, their institutions and networks, since they provided the goods that different regions demanded. In the process, they transmitted added cultural and social values (lifestyles and institutions) that were selectively adopted across cultural and ethnic identities (Alberti and Sabatini 2013; Burns 2010; Steel 2013). In addition, it is important to note that, with the possible exception of Andean and Hawaiian civilizations, where craft specialists instead replaced trade, traders, and their companions (whether they were warriors, caravans, ship crews, or craft specialists). Traders were allowed and, indeed, invited across political and cultural boundaries precisely because they could provide valuable goods and knowledge from faraway places. Furthermore, the case studies included in this volume amply demonstrate that these commercial operations had the capacity to transform societies that were linked together in a two-way process. Agents of goods thus became agents of change, and, in the process, world systems were transformed into shared value systems and, indeed, economic systems, which can be termed civilizations. However, there were other mechanisms than trade, which also contributed to such transformations. I shall therefore in conclusion widen the perspective to a discussion of how trade interacted with other powerful processes in the expansion of civilization, which Chris Gosden considers early forms of colonialism (Gosden 2004).

CIVILIZATIONS IN THE MAKING

We can observe the concomitant expansion of trade and civilization from their early beginnings in western Eurasia, including northern India, Iran, Mesopotamia, and Egypt from 3000 BC, after 2000 BC also including China (Thorp 2006), and central Asia, by Goody (2010) termed "The Eurasian Miracle," which through cyclical expansions and regressions finally encompassed most of the globe around AD 1500. While trade played a crucial role in this expansion, it is also clear that it often went hand in hand with, or was preceded by, colonial expansion of various types. We should here make a clear distinction between various types of colonialism, from soft cultural colonization to demographic and political/military colonization (Gosden 2004: Table 3.1). Behind the civilizational process we are thus encountering also the capacity to sustain political systems and trade systems vital for its maintenance through a combination of military power, and political alliances. Since, however, trade systems ranged far beyond the powers of individual states, and even beyond the

political alliances between states, traders operated both inside and outside such boundaries. They linked different polities by employing existing infrastructures and setting up new infrastructures where needed. They represented an independent yet dependent soft force. However, this relied upon another force, that of military power.

The organized use of force, and the invention of modern weapons, such as swords, lances, and protective armor to support it, has its origin in the Bronze Age. This is no coincidence, and goes some way to explain not only the rise of the state and civilization, but also the capacity to support and protect long distance trade. Thus the rise of organized warfare and martial arts had both a peace keeping protective role, as well as a destructive, invasive role, as pointed out by Morris (Morris 2015: Table 2.1 and 2.9). Such weapons were rapidly exported to the peripheries of Bronze Age states, where they started a new dynamic of intermediate civilizational peripheries, which economically at least were part of the civilizational system and world system (Chase-Dunn and Hall 1997: Part II; Chase-Dunn and Jorgeson 2001). These very same peripheries, some close, some more distant, selectively adopted part of the civilizational package as demonstrated in chapters by Junker, Kristiansen, Gaimster, and Rowlands, and they became regions of prestige goods consumption, which during the Bronze Age is evidenced in ostentatious metal consumption (Wengrow 2010: Map 6), as they controlled mineral rich mining areas (Carpathians, Caucasus, Urals to mention some), that the centers of civilization needed. These peripheries would enter the civilizational cosmologies as distant places where first gods travelled and brought back sacred luxury goods such as amber from the Baltic (the tears of the Gods), and lapis lazuli (the eyes and hair of the Gods) from Afghanistan (Kristiansen and Larsson 2005: chapter 2.4; Wengrow 2010: chapter 2). They also provided other important goods, such as horses for chariots from the steppe, and in periods of crisis mercenaries.

Like traders, warriors were operating as free agents from the Bronze Age onwards, at least in part, selling their skills both to rulers as mercenaries, as well as to trading enterprises. Such mercenaries were often recruited from the closer peripheries of civilizations, from Celtic and Germanic warriors to Viking guards in Constantinople. They went hand in hand with the civilizational process, since its very beginning, and were thus part of the dynamics of Barbarian invasions into states and empires throughout history. Often introducing new technologies of warfare, such as chariots from the steppe in the early second millennium BC, new forms of infantry (hoplite formations), or new mounted warriors of the steppe in the Iron Age (Morris 2014: Figure 3.3). Out of every Dark Age there emerged new Renaissances of civilization (Goody 2010; Modelski 2007), and over time they expanded the boundaries of civilization leading to the formation of new empires such as the Assyrian, Persian, Greek, and Roman empires in the west, and similar new empires in east and south-east

Asia (China and later empires in Burma, Korea, and Japan), Africa (the Bantu), and south America (the Incas).

Whether we reserve the term civilization to define its core areas and their long-term history, or we expand it to encompass the whole geographical range on which it depended remains a matter of debate. The contributors in this volume take different stances here, and I thus leave the question open for further debate. However, one thing remains clear from this enterprise: it is not possible to maintain a Eurocentric view of the historical process of trade and civilization. It remains true that every civilization always retained a concentric view of itself, defining peripheries and competing states as "Barbarians," and "Eurocentrism" is just the latest historical example of castigating the "Other" as inferior (Goody 2006). But in all probability it will not be the last.

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TWO

CLOTH AND CURRENCY: ON THE RITUAL-ECONOMICS OF EURASIAN TEXTILE CIRCULATION AND THE ORIGINS OF TRADE, FIFTH TO SECOND MILLENNIA BC

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CIVILIZATION AND THE ORIGINS OF TRADE

The meaning of "trade" and the understanding of its role in human societies lies at the root of – at least to the modern observer – one of the most confusing paradoxes in the relationship between objects and people. The recognition of this puzzle was touched upon by Marx and his comments on the "commodity fetish" (Marx 1906). Under capitalism, objects (or rather commodities) are collected, made, or worked upon by human labor in certain social spheres (of "production") and then wrenched and transported into totally different spheres (of "consumption"). The "value" of these objects is realized primarily in the consumption sphere: authenticity and social credit accruing to the judicial buyer, whilst the skills and aura of the laborer are effaced through the transition between spheres. To use Weber's borrowing from Schiller, most acts of production in capitalism are "disenchanted" (Greisman 1976) and rational, except perhaps for certain ring-fenced and strictly regulated fields of labor, bounded under the label of "art" and created by specialist "artists" who are

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often required to live slightly outside the conventions of normal society to draw on aspects of the sublime or divine.

Lingering ambiguity about the consequences of the separation of spheres of production and consumption remain embedded in our everyday discourse on consumerism. This ambiguity of meaning is best understood through a concrete example of uncertain authenticity: How is it that an object of mass-produced clothing – bought off the shelf from a branch of the high-street clothes shop H&M, whose raw materials may have come from Central Asia, Egypt, or the United States, whose assembly may have taken place at any number of textile mills across the Third World, alongside thousands or perhaps even millions of identical or near identical copies – can nonetheless come to play a central role in personal, "individual," or group identities and their resulting human relationships by its adornment on a human body? Whether this kind of use of commodities is "authentic" is essentially a moral question (to which we will turn later), but important here is the clear implication of this paradox: that there is an alternative model, one in which the spheres of production and consumption are not separate (e.g., knit-your-own jumper!) and where the producer accrues authenticity and social credit.

On close inspection, this autarkic alternative is rather unrealistic, at least if you see producer and consumer as representing the same individual (taking the literal implications of "Man Makes Himself," cf. Childe 1941); there is almost no part of human activity (especially relating to objects) that is not dependent on "exchange" and "interaction" with others. Indeed, how exactly would one measure "social credit" without the change in behavior affected by fellow human beings toward an individual? One should take care, perhaps, with making the division between "production" and "consumption" in any case; many economic acts could be classified as either (or both) depending on your perspective: By presenting a gift, are you "producing" value or "consuming" it?

Perhaps the more distinctive thing that Marx captures in his analysis of capitalism, then, is its associated disconnect between networks of people and networks of things. In a hypothetical noncapitalist small-scale society, everyone is known to everyone and hence, production and consumption spheres are intervisible: The flow of objects closely mimic the flow of people. Under capitalist large-scale societies, by contrast, producers and consumers are most often strangers: Objects can flow along totally different networks from those traveled by humans.

This somewhat abstract preamble allows us to construct a different definition of "trade," one that does not irrevocably associate it with "bulk" trade so important to Wallerstein's analysis of the modern world system (cf. critique from Schneider 1977; Sherratt and Sherratt 1998), but nonetheless sets it aside as a distinct kind of activity. In this definition, trade is the exchange of materials, objects, or services in which, hypothetically at least, the participants

are of equal (legal) status and in which the items exchanged are judged to be in some sense of equal value (or that each participant feels they are gaining profit from the transaction), whereby, again in theory, once the ritual of trade has been completed, the relationship between participants may also be terminated with no loss of face. This contrasts with other types of exchange (tribute, gift-giving, sharing) in which the status is clearly unequal (e.g., between gods and mortals) or where to end a relationship after the transaction would be tantamount to a slap in the face or a declaration of war, for example if one were to accept or give a present to a family member and then refuse to speak to them again.

To clarify further, it may be useful to instead ask what trade "does" rather than what it "is": Trade offers a set of abstract social rules, which allow the exchange of materials between strangers and, thus, over long distances. It facilitates social life in an anonymous sphere by being generalized (or at least imagined to be so) for many different communities (cf. the imagined communities of nations, Anderson 1983), and for this reason, it is particularly associated with "large-scale" or "complex" societies, although such stranger-to-stranger connections should not be considered exclusive to the urban environment. "Gift exchange," by contrast, is precisely designed to build ongoing relationships using culturally specific rituals, usually amongst those who know each other well or are directly reliant on each other. Of course, in practice, most exchange relationships cannot be neatly fitted into either ideal; in commercial situations, ongoing relationships are often strong – for example, when returning to the same seller or buyer, or when giving preferential prices to friends and relations – and, in ostensibly personal networks, certain types of transactions may be read as profit oriented. Additionally, the same objects can be passed along human networks using a mixture of different modes of exchange (cf. Kopytoff 1986).

The implication of this definition is that "trade," as a mode of exchange between strangers, arose with the first cognitively modern humans and remains an aspect of all human economies. The "origins" of trade, let alone capitalism, should not be thought to emerge as some radically different new behavior at any one moment. Nonetheless, a regular need to transact with strangers probably formed a relatively small part of the overall concerns of individuals and groups in the small-scale societies that were typical of most parts of the world until relatively recently. With the rising density of human settlement associated with agricultural and then urban revolutions, social networks moved beyond the cognitive limits of human sociality, typically, if controversially, cited at about 148 individuals (following Dunbar 1992). This created a growing necessity to interact with a greater number of strangers. The prominence of trade therefore seems to increase through time – both within settled groups and with more traditional mobile ones – starting gradually in the Old World from the ninth

or eighth millennium BC especially around the so-called Fertile Crescent, but expanding and deepening into the following centuries, perhaps rather dramatically during the Eurasian Bronze Age, circa third and second millennia BC, by which time large interregional and perhaps even intercontinental trade networks may have been in existence (Frank 1993; Kohl 1978a; Ratnagar 2006). This chapter aims to look precisely at the run-up to this expansion (or intensification) of trade between the fourth and second millennia BC.

This approach also helps us to clarify the relationship of trade to "civilization." It is an uncomfortable word to the modern archaeologist, at least when "civilization" appears to imply totality (i.e., civilization against barbarism) or multiplicity (in the Howardian sense of "clash of civilizations," cf. Rowlands, this volume). But "civilization," like trade, is perhaps best understood not by what it is, but what it does. Civilization organizes and structures very large groups of people: As such it can be seen as a set of generalized social rules, of which trade – that is, exchange with strangers, though not necessarily long-distance or bulk trade (cf. Earle, this volume) – is one important aspect. In the case of Near Eastern and European "civilization" – and if one accepts that there is a degree of continuity to "Western" economic structures down to the modern day – one of the most important trades with strangers was in dress or textiles. This fact takes on added significance when one considers one of the priorities of European imperial expansionism in its self-conscious "civilizing" missions in the New World, Africa, and Asia, was the creation or at least elaboration of the Janus concepts of nakedness and clothing (Comaroff 1996). The same mission, of course, also had the effect of sustaining and expanding European cloth manufacturing industries (see e.g., Riello 2010). Since our first written records of commerce began in Mesopotamia, the textile industry has played a pivotal if not dominant role in urban and market economies. The textile-related etymology of the word "investment" – which, according to the *Oxford English Dictionary*, entered the English language from Italian merchant parlance during the era when merchants of Venice and Genoa were critical agents in the trade of textiles between Europe and the Eastern Mediterranean and beyond – is telling, reminding us of the deep relationship between capital and cloth. This chapter will attempt, at least partly, to explore this relationship, arguing for a particular role for textiles as agents of change, allowing the establishment of state-based societies and what could be called "metal ritual-economies." If the evidence for trade is occasionally scant and circumstantial for our period of interest, the particular focus on textiles exaggerates this problem further. Nonetheless, pursuing this oft-invisible material provides precious insights over more archaeologically accessible categories.

Finally, the term "ritual-economics" in the title also needs some explanation, to help shed light on the approach taken here. What is referenced by this phrase – borrowed from D. Wengrow's interpretation of metal hoarding and

deposition zones in Bronze Age Eurasia (see Wengrow 2011) – is the anthropological assertion that "economic" activities are always ritually and morally constituted, based on a set of contingent and sometimes conflicting transactional or cultural rules. This approach contrasts with orthodox economic theory dating back to Adam Smith, in which economics is treated as a separate sphere of human interaction that can be studied in isolation from morality, ritual, or other culturally contingent factors. At some level, ritual-economy refers to the same kind of field as, what used to be called in Marxian accounts, "ideology." Ritual-economy is a more helpful term, however, because it reflects the necessity of active performance of social and moral ideas through physical ritual and ritualized contexts of production, exchange, and consumption and involving physical ritually created objects: That is, it is not that ideology is "materialized" through objects, but that objects *are* material ideas. This term also has the benefit of linking economics to religion and to discourses on morality (i.e., on what is good and bad) whose relevance, if not already self-evident, should slowly become clear through the course of this chapter.

"TRADE" IN PLAIN LIGHT: OLD ASSYRIAN TEXTILE CIRCULATION

It is common to associate the beginnings of commercial exchange with the fourth millennium BC and the emergence of the world's first urban or state systems, that is the world's first "civilization" (Trigger 2003; Ur 2010). But on any informal definition, including the one outlined in the preceding text, long-distance circulation of small quantities of exotic materials in Eurasia (particularly in the Near East) goes back considerably further. One well-known example is the widespread distribution of obsidian between the highland sources and communities in Iran, Anatolia, and the Levant, which dates back to the Neolithic (Cauvin 2002; Healey 2007) and continued well into the Bronze Age (Frahm and Feinberg 2013). During the fifth millennium BC – the so-called 'Ubaid era in Mesopotamia – an even wider circulation network is evidenced especially by the distribution of "precious" colored stones (in the form of beads, including copper) and shared cultural ideas about architectural space and food production (Stein 2010: 28–30), even if the political orientation of these groups might have been based primarily on control over local resources (Stein 1994). What is interesting about this era is the absence of urban architecture or social structures – whether systems of standardization (of weight, volume) or of recording (i.e., systematic writing) – that would otherwise facilitate larger-scale agglomeration and/or elite differentiation. The exceptions to this are the nascent sealing practices identified at certain sites in the Late 'Ubaid or end of the fifth millennium BC (see, e.g., Değirmentepe, Esin 1990; Tell esh-Sheikh, Aruz 1992; Tepe Gawra, Rothman 2002: 81–83; Tal-e Bakun B, Alizadeh 2006: 5, 83–90), which presumably document a rising

need to create systems of trust in the context of a growing need to interact with strangers. In this sense, northern 'Ubaid communities may have created the first generalized conceptual framework for "trade" over long distances.

So far, there is little indication, technological, or even iconographic, of any role for textiles in these fifth millennium circulation networks. Admittedly, this impression may be due to preservation bias that obscures a vital invisible flow. But on present evidence it seems plausible that industrial-scale textile production and circulation only really began in the fourth millennium. Indeed, Guillermo Algaze has for some time argued for a major role for textiles and the textile industry in the creation of the expansive Late Uruk phenomenon. Southern Mesopotamia's unique advantage was partly geographical access, partly a successful elite socioeconomic strategy of value multiplication, converting cheap "imports" into expensive "exports" (Algaze 2001, 2005). His characterization of northern Syro-Mesopotamia as backward compared to the south may now be considered unbalanced in terms of extent and complexity of urbanism (Oates et al. 2007), but his basic model of a "Sumerian take-off" is still interesting to consider. In Algaze's view, textiles represented the pinnacle of added-value exports; and its production, all but invisible in direct terms, may have been the driving force behind a "labor revolution," including the rise of slavery or bondage, documented by the high number of references to signs that we believe mean "female slave," "laborer," or "male slave" within the Late Uruk, or so-called Archaic, corpus of texts (Algaze 2001: 212; Englund 1998).

Algaze's suggestions are provocative and intriguing even if their consequences for the mode of exchange are difficult to explore in detail given the limited nature of the early texts. To see the range of potential relationships between trade and textiles in a plainer light, it is easier to review the sources from some much later periods, namely in the second millennium BC of Anatolia, set against recent ethnographic accounts of cloth circulation. Those interested in the topic of trade and especially of ancient textiles are very familiar with the Old Assyrian Trade Colony System through their revealing textual record. Though representing a very narrow chronological period – effectively the great majority of the 23,000 texts so far unearthed date between 1895 and 1865 BC (Barjamovic, Hertel, and Larsen 2012) and come almost exclusively from the site of Kültepe – they document a snapshot of an impressive ongoing system of commodity circulation administered by expatriate Assyrians from northern Mesopotamia (see Barjamovic 2011; Barjamovic, this volume). Besides metals (tin and copper are mentioned most frequently as commodities, plus silver and gold as currencies), the major manufactured commodities mentioned by these texts are textiles. The extant texts presumably represent only a partial proportion of the trade, but nonetheless record huge quantities of cloth being

shipped from Assur to Kültepe at a profit measured in silver (Barjamovic, this volume). Besides numbers, the texts record variations in cloth qualities, geographic and stylistic origins, materials and colors, and their relative costs (Michel and Veenhof 2010).

Despite these fascinating details, it remains unclear exactly what these fabrics looked like, precisely how they were made and exactly what their ultimate destinations and their contexts of consumption were, especially because direct archaeological evidence of any cloth is almost completely absent. Clues may be sought from studies of specialist textile production, for example the distinctive use of twill or twill-like patterns implied by crescent-shaped loom weights and clothing patterns shown in glyptic images (see Lassen 2013) or from the rise of painted pottery and wall paintings associated with this period (Wilkinson 2014a).

These issues aside, what is important to learn from the Old Assyrian texts is the high degree to which international trade in textiles was developed – in both political and legal systems and physical infrastructure – in a way that would be broadly recognizable to recent historical or modern traders. The suggestion, which has been made very explicitly and convincingly by Barjamovic (this volume), is that the overall trading system was already established for a few hundred years, even if the exact frameworks and partners had changed over time. One additional feature that is striking relates to the role of local states and particularly the use of cloth as tax (Larsen 1967). According to numerous contracts, local Anatolian rulers at cities where the Assyrians traded, or at least their representatives, were entitled to choose a certain percentage (*išrātum* or tithe) from the stock of the newly arrived caravan shipment, then levy an excise tax (*nishātum*) as the goods were cleared for sale (Veenhof 1972: 85–86; Veenhof and Eidem 2008: 83; with regard to wool, see Lassen 2010).

> By way of example, regarding imported textiles:
>
> *Out of 42 textiles (from) the house of Aššur-malik: 2 ½ textiles are the nishatum-tax; x+½ shekels of silver will be paid; x+5 textiles for pre-emption; 1 textile is lost; 40 textiles /…\; 3 ½ textiles the karum-authority will take.* (Harvard Art Museum 1983.98; translation: D. Ragavan)
>
> *To the Kaneš Colony from the Hurama Colony. The king of Hurama has issued a decree, saying … The king can deduct 10 textiles from your textiles.* (Kt m/k 134: l1–21; translation: G. Barjamovic 2011: 184)

And, regarding local textiles:

> *From every 10 parakannum-textiles you will take 1 parakannum-textile (as) your nishātum-tax. If the textile is taken in the city-gate, the textile will cost a fixed price.* (Kt 00/k 6: l69–72; translation: A.W. Lassen 2010)

Whilst in some cases these kinds of transactions were couched in the language of gifts (Barjamovic 2011: 310) – given to the authorities as a kind of social lubricant or, perhaps more cynically, as a bribe – it is also clear that, at least in this particular context, textiles can also act as a type of taxable currency within the Anatolian milieu. Though it is unclear what happened next to the textiles collected as *ešrātum*, it seems reasonable to assume that such objects were accumulated and periodically distributed amongst the faithful dependents of the king or deposited in sanctuaries for the gods – much like the metal bullion whose accumulation "incentivized" the Assyrian traders – or else exported again to the next trading circuit in exchange for silver. In itself, the idea of commodities being siphoned off as tax rather than their equivalent in metals is not unsurprising if they were so valuable to Anatolian elites, but what is the significance of this pseudocurrency role for textiles?

ETHNOGRAPHIC NOTES ON TEXTILE CIRCULATION AND TEXTILE CURRENCY

Before considering this further, it is important to ask: What exactly is a "currency" (or money), and why would it be important to this story? It is rather difficult to provide a concise definition, but at the simplest, currency is simultaneously both a physical token of "value" and an abstract symbol for "valuation" (Maurer 2006). It is a material system of organizing the transfer of rights: that is, who is or – perhaps more importantly – who is *not* entitled to certain resources; and it mediates the exchange of other objects and duties. Currencies can veer between an emphasis on their "physical" and "virtual" nature through time – as the relationship between modern currencies and the "Bretton Woods" gold standard illustrate (Corbridge and Thrift 1994). Before the invention of coinage in Anatolia, India, and China around the mid-first millennium BC (Schaps 2007a, 2007b), currencies were not, of course, always represented by pieces of stamped or molded metal (indeed, in most parts of the world they continued not to be). However, cuneiform accounts imply that silver had become a near-universal measure of value in Mesopotamia during the third millennium BC (Moorey 1999: 237), and still functioned this way for the Old Assyrian merchants and their associates (Dercksen 2005).

The historical and ethnographic literature refers to many different types of objects or materials being used as "currency": including bangles, beads, cowrie shells, feathers, cattle, axes, or blankets (Einzig 1949: 29–307). As David Graeber has pointed out (Graeber 2001: 91–94), what is common to many currencies, with the exception perhaps of examples like salt, is their role in adorning the body in some way. In this light, it is not insignificant that, if one thinks of the very earliest use of metals in the Old World (e.g., at Çayönü, see Stech 1990),

it is not as "tools" to replace stone ones but as beads and jewelry to adorn the body. Woven textiles are simply one of a number of elaborated forms of body adornment techniques, and it is therefore not surprising that they should sometimes have been used as "currency."

Some classic ethnographic case studies of textiles as currency, or textiles as wealth, are worth exploring here. All of them can be found discussed, to differing depths, in the excellent collection of essays edited by Jane Schneider and Annette Weiner, *Cloth and Human Experience* (1991).

Lele and Raffia *Cloth*

Perhaps the best-known case of cloth as currency is that of the Lele of West Africa, studied by Mary Douglas in the 1950s (Douglas 1958). In this region, the young men of Lele communities devoted a large proportion of their time to the production and circulation of *raffia* cloth, made from the raffia palm. The cloths were required as gifts at key events: particularly to wives after a birth; or on evidence of fidelity; to parents of the bride upon marriage; or to other men as recompense for an acknowledged adultery with the other man's wife. But they were also given informally to smooth all social relations. Although they could be worn, *raffia* clothing only survived for around four months in full-time use, which together with their requirement as dues for entering new status or relations, created an endless demand for new cloth. Their status as garments or body ornamentation was thus almost secondary, and their primary purpose was as a tool for organizing relationships, particularly between men and women. Despite their role in exchange, they never formed a "universal" convertible currency, as demonstrated by Douglas's own futile attempts to purchase *raffia* cloth using francs. Instead, they remained built into *particular* social networks of obligation and relatedness.

Trobrianders and Banana Palm Bundles

Amongst the Trobrianders – famous in anthropological studies of exchange by the ethnographic account of their *kula* circuit brought to light by Bruno Malinowski (1922) and famously reinterpreted by Marcel Mauss in his canonical *Essai sur le don* (Mauss 2002) – Annette Weiner highlighted an aspect of activity completely ignored by Malinowski in favor of the male-orientated *kula* trade, namely the production and dissemination of banana palm bundles and skirts (Weiner 1991; cf. Weiner 1992). Immense amounts of women's labor time were devoted to bundle production, to be given away on the rituals associated with a death. These "funerary" gifts represented tokens of wealth but also a kind of post-mortem balancing of the books, as "replacement of all that has been given by members of other matrilineages to the dead person during

her or his life" (Weiner 1991: 39). The bundles were short-lived expendable items, used on the occasion of the disseminating funeral and associated rituals but not designed to be curated. Significantly, the prestige of a male chief was regulated by his wives' ability to distribute this cloth-wealth to kin as indirect exchange for political support, thereby providing a balance to a chief's political domination.

Samoa and 'Ie Toga/Pandanu Mats

In Samoa, by contrast, Weiner noted the curation and hoarding of "inalienable" cloth as dynastic treasure was one of the main features of the female production of decorated mats, made from fibers of the *pandanu*. After completion, mats were given either away by their makers, on the occasion of key social rituals (births, marriages, deaths, and dynastic *investitures*) or stockpiled in matrilineal family caches: in both cases to "emphasize association with ancestors and events of the past, as well as legitimate claims to title and rank" (Weiner and Schneider 1991: 5). A women's relationship to her brother(s) played an essential role in the circulation of this cloth. While production of new mats was important, even more essential was the ability of participants to keep mats within their descent group as a reflection or demonstration of the group's strength.

Each of these cultural contexts illustrates the way textiles are used in so-called small-scale societies to form and organize persons and their relationships in rather different ways. In the case of the Trobrianders, cloths (or bundles) are produced rapidly as short-lived expendable items to be dispersed rapidly on death as a way to measure and renegotiate rank in a relatively unstable distributed power system. In the case of Samoa, mats are produced slowly and circulated or curated very carefully to ensure that the most valuable items remain wedded to their matrilineal communities, mixing "contradictory yearnings – for circulation and permanence" (Weiner and Schneider 1991: 6). The Samoan use of cloth recalls, to some extent, the carefully orchestrated circulation of Chilkat blankets as part of the potlatch ceremonies of the northwest coast of North America, such as the Kwakiutl, in which rights and duties were also organized around houses (cf. Levi-Strauss's concept of "house-societies," Lévi-Strauss 1983; Joyce and Gillespie 2000). For the Lele, *raffia* cloth, produced exclusively by men, can only be circulated within certain networks because it is required to achieve certain social goals or create social relations. In all these cases, the value of cloth has a direct bearing on power relationships between men and women, and on the relative rank of the producers and/or receivers. In some cases, producers are superior, in some cases receivers, and in others it is a third party who can "cash in" the associated status life produced by the exchange. A commonality is the generation of "benevolent spiritual or ancestral involvement" in the production of cloth, which facilitates the transfer of other

goods and duties between people (Weiner and Schneider 1991: 11). Other examples also show this aspect includes the Sakalava of coastal Madagascar, among whom the dead are wrapped in specially produced *lamba* cloth (Feeley-Harnik 1991); or the Kodi of Indonesia, amongst whom the dyeing of textiles and associated smells are likened to putrefying flesh and linked to a system of prohibitions and taboos between birth, death, and menstruation (Hoskins 1991). Schneider argues further, in fact, that one of the key effects of a capitalist mode of textile production is the disenchantment of the production end of textile activity, replaced by a cultural emphasis on the enchantment contained, instead, within the ability to acquire and consume cloth (Schneider 1991).

What textiles do not seem to do, at least in these case studies, is to transform into a *universal* abstract currency, or even, for that matter, a universally tradable commodity. Instead, they seem to stay embedded in social relations of obligation and kinship. Why is this the case? Annette Weiner draws on a distinction between "hard" and "soft" currencies: bones, metals, and stone on the one hand, and cloth and flesh on the other (Weiner 1992: 59). Such materials are commonly treated as oppositional symbolic qualities, and we might emphasize the effects of this materiality on potential modes of exchange (or nonexchange). Whilst hard, metal, of course, is additionally especially "liquid": It can be melted down and remade infinitely and split perfectly into a continuous range of proportions. These material qualities facilitate its use as a semiotic sign (symbol/index) for the abstract quantitative nature of value. By contrast, the substance of cloth, while it can be produced in an infinite variety of forms and even cut and recombined on occasions, tends to resist this kind of biographic erasure and reinvention of form. In fact, the myriad heterogeneity of cloth and the often-unique forms individual cloths can make it difficult to use cloth as a symbol or measure of universal abstract equivalence because (unless we are talking about mass-produced cloths) textiles are more easily ranked *qualitatively* not *quantitatively* or *proportionally*.

Textiles as valuables tend toward inalienability (in the sense described by Weiner 1992) and biographic specificity (cf. the object biographies described by Kopytoff 1986). Even when exchanged, it is difficult to strip a cloth of its narrative or biographic associations, thus some "spirit" or "aura" of the producer or the giver is retained. Additionally, while valued cloths, clothes, and rugs may be accumulated and curated through time, their life cycle is finite and hence temporally less redeployable. Indeed, under modern capitalist tradition, the value of cloth is generated through a "fashion system" that elevates and exaggerates this short life cycle to a process of rapid and obligatory obsolescence (Barthes 1983). In some sense, cloth also "wants" to be looked at (cf. Mitchell 1996), certainly more so than other materializations of social value that are less powerful visually and hence more appropriate to caching (Graeber 2001: 91–115). Of course, textiles can be cached and hidden away

for some while ("accumulated" in capitalist terms), as they are in the Samoan example, but to maintain value and meaning they must be periodically seen or circulated before being rehidden. Thus, in economies where evident wealth and high visibility, as opposed to hidden potential, forms the dominant mode of value assessment (a sort of materialism of "bling"), cloth can play a more important role.

Returning to the Old Assyrian texts, there appear to be traces of overlapping modes of exchange applied to textiles. Given the endless profit listings tallied against cloths by these merchants, textiles were often convertible, in a commercial sense, into hard currency or debt promises with distant agents that are recognizable as typical of modern trade. By contrast, the tithe or tax on textiles hints at the use of cloth as a kind of social currency in certain specific social contexts (in obtaining rights to trade or in rewarding service), some of which were not directly convertible into other forms of wealth. It is interesting to note that certain types of textiles in the Kültepe texts are given geographic designations (*nisbe*) that do not necessarily seem to be simply about place of manufacture, whereas metals (or at least silver and tin) are given no such linguistic distinction. If the Old Assyrian evidence documents an already elaborate and extensive system of trade in textiles from the Near East to Anatolia that cross-cut and interfaced with other forms of exchange (representing only one particularly well-documented example from a number of contemporary such trading systems), the question becomes one of scale: Where and at what point in time did "open" circulation – that is, long-distance trade with strangers facilitated through metal-based *currency* (whether actual bullion or virtual debt notation) – become culturally significant, and why?

THE ARCHAEOLOGY OF TEXTILE CIRCULATION IN THE FOURTH AND THIRD MILLENNIA BC

Let us turn to the archaeological evidence from the two millennia before the Old Assyrian trade, and in particular to a significant junction in the history of textile innovations, namely the start of exploitation of sheep wool fibers across the Near East (Sherratt 1997: 180–181) and the increasing, perhaps related, popularity of the vertical loom (Barber 1991: 82, 213, 250–253). On current evidence, sheep's wool seems to have been first used during the fifth millennium BC (Good 1999, 2006; Sudo 2010), but the major period of adoption (at least in Anatolia, Mesopotamia, Iran, and Transcaucasia) lies in the fourth millennium BC (Barber 1991: 24–25). Even after widespread adoption by the third millennium, it is difficult to say what proportion of clothing or cloth-type wrappings was made from wool as opposed to vegetable or bast fibers such as linen, or even, alternatively, from animal fleece, skin, or leather.

Because direct textile remains from our period of interest are far from common, the most indicative evidence for this wool-textile expansion lies in two main fields. First, changes in sheep-husbandry practices, gleaned predominantly from kill-off curves in faunal assemblages, appear to support the idea that wool was one of the primary aims of sheep breeding (Payne 1973; although see also Marom and Bar-Oz 2009).

Second, there is a dramatic leap in scale of evidence relating to textile production from the fourth millennium BC onward, particularly spinning and weaving. Some identifiable technical changes associated with this leap, it has been argued, may directly index a change in fiber to wool: for example at Tell Kosak Shamali (Sudo 2010) or at Arslantepe (Frangipane et al. 2009). Joy McCorriston (1997) described the transition to wool in Mesopotamia as a "fiber revolution" and linked the emergence of wool with an "extensification" of lowland labor organization, with new forms of gender division and the freeing up of valuable agricultural land. This allowed, in her view, the resulting "surplus" to fund the labor needed to produce and export textiles to peripheral regions in exchange for exotic materials such as copper, silver, and gold, which represented charged symbolic items to Uruk and subsequent urban economies. Her intriguing, if speculative, explanation for why this fiber revolution should have taken place in southern Mesopotamia, noted in a public comment on a paper by G. Algaze (McCorriston 2001), is that Sumer was geographically positioned to exploit the sources of various important colored dyes – one of wool's main technological advantage over linen being its relative ease of dyeing compared to bast fibers – in a way that no other cultural region could exploit at that time.

A nuanced picture is slowly being gleaned from parts of the Near Eastern "periphery." Ulf-Dietrich Schoop's (2014) recent analysis and interpretation of the western Anatolian evidence for textile manufacture (e.g., loom weights and spindle whorls) from the late fifth to the early third millennium seems to document an intensification of production and wool husbandry at many sites during the fourth millennium. He highlights the apparent continuation of flax production and stability of sheep herd sizes to suggest that there was no "extensification" process in Anatolia. He takes this to mean that, while textiles became a central medium of social relations in fourth millennium Anatolia, the basis of the associated social economy was one predicated on and limited to producing and circulating cloth to maintain an essentially unstable social status, not on accumulation and maintenance of (putatively) permanent hierarchies. Here Schoop makes a direct comparison between this reconstruction and the Lele example mentioned previously. Though we have no direct evidence that would indicate the actual distances such textiles were circulating, if Schoop's analysis of the west and central Anatolian textile landscape is accurate and comparisons with the Lele appropriate, it would be difficult to call this "trade."

The geographic footprint of any particular textile product is likely to be rather small because the purpose in giving and receiving is to obtain direct social capital and obligations from known relations, not accumulating an abstract wealth whose deployment of "value" can be delayed. In local terms, that is using the Lele comparison, it would be senseless to do otherwise: Who wants to produce such valuable items for people you will never meet and with whom you will never form an advantageous long-term alliance?

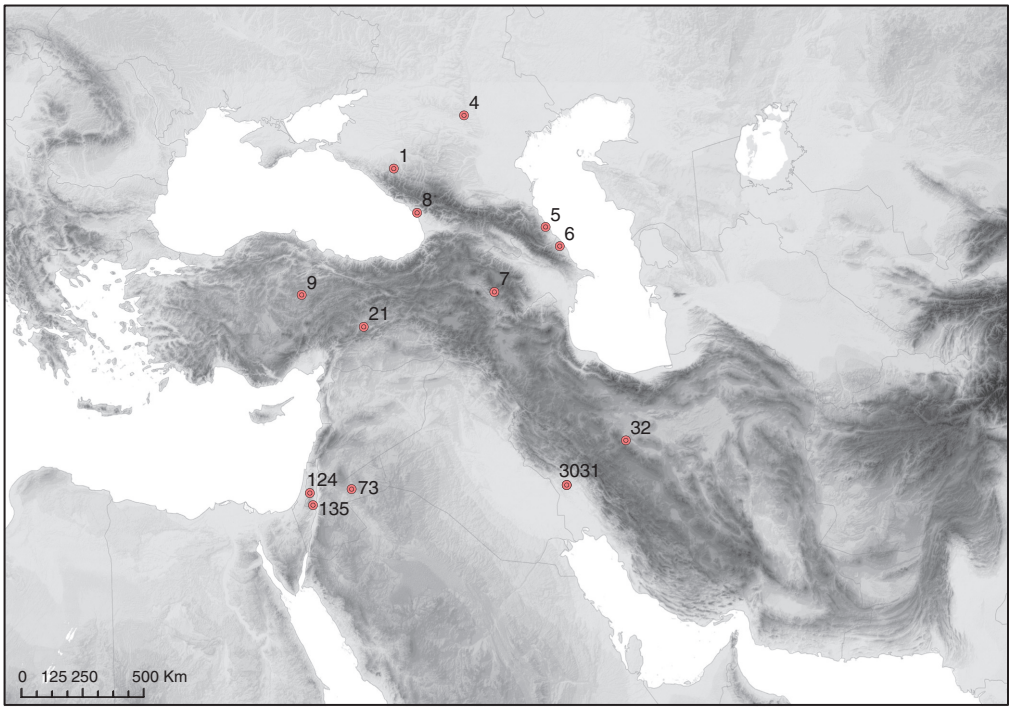
By contrast, a different set of dynamics may have been playing out in the steppes west and north of the Caspian. In certain late fourth millennium graves (related to the Maikop-Novosvobodnaya, 3300–2900 BC and Yamnaya/Pit-Grave, ca. 3300–3000 BC), a number of actual textile remains have been preserved and recovered (Shishlina et al. 2003), some of which hint at long-distance movement of textiles. Possible cotton fibers, for example from Kurgan 2 at Tsarskaya/Novosvobodnaya, might represent a deposition of valuable "imported" fibers or cloth likely grown as far away as Iran or the Indus – the Iranian connections with Maikop perhaps being as important as those with the Late Uruk communities of Mesopotamia (Ivanova 2012). Can these possible exotic finds be characterized as the result of "trade" or some other circulatory mechanism? The very small number of preserved samples and thus their unrepresentative nature makes it impossible to compare with Renfrew's classic fall-off pattern characteristics for us to comment on the possible mode of exchange behind such distributions (Renfrew 1975). Given the relatively weak cultural similarities between the Caucasus, the possible fiber source and the intermediate regions, some form of "down-the-line" mechanism seems more plausible than a bulk (albeit high-value) commodity system like the Old Assyrian one. Nonetheless, we should probably assume that such flows were concentrated along certain regular lines and not dispersed evenly across the landscape. At the very least, it does imply that, in some regions at least, "foreign" cloths or raw fibers could, on occasion, travel very large distances. Communities of the steppes at this time were clearly engaged in differentiating strategies (documented in rich burials), which are not seen explicitly in Anatolia until the mid-third millennium (e.g., at Alacahöyük). Although elites of this region were obtaining exotic materials, it seems likely to be through very personalized networks of obligation – not dissimilar, perhaps, to the chiefdoms of Hawai'i (cf. Earle, this volume; Earle 2002).

Key to understanding the density of these flows, and thus likely mechanisms, must be the available transportation technologies, and it is certainly relevant that wheeled vehicles, donkeys, and horses appear to have played an increasing role in Mesopotamia (Sherratt 1983: 95–97), Transcaucasia (Sagona 2013), and the Caspian steppes (Anthony 2007: 300–339) at around this time. Somewhat mysteriously, the Transcaucasian zone lying directly between Mesopotamia and the steppes and typified in the late fourth and most of the third millennium

by the so-called Kura-Arax, Karaz, or Early Transcaucasian phenomenon (see Palumbi and Chataigner 2014; and other contributions in the same volume), represents a curious blank as far as discussion of textiles and textile circulation goes. The Kura-Arax role in metal procurement is a matter of debate (Wilkinson 2014b), but contemporary evidence for textiles has never been seriously examined. It is possible they avoided woven textiles completely, relying instead on animal skin or leather products, as part of their apparently deeply conservative cultural outlook. There are many dress pins (including the famous double-spiral-headed variety, cf. Huot 2009) and bone awls, but it is not clear whether these could have been for leather instead. On the basis of pseudomorphic impressions on ceramics, it seems that some Kura-Arax–related pottery was formed using rough cloth; however, so far, the nature of the cloth used has not been examined in detail (Heinsch and Vandiver 2006).

Further east, in Iran, Afghanistan, Turkmenistan, and the Indus, textile evidence is similarly understudied. One hint as to the possibility of a system of textile circulation is the efflorescence of a cultural zone with painted polychromatic patterned wares, whose patterns are remarkably like those of woven textiles, especially the Namazga III/Geoksyur era wares (ca. 3300–2800 BC). A close range of similarly painted schemes are found distributed over a vast region from Turkmenistan to Seistan, prompting the idea that they record the ceramic fossil of a large-scale cloth circulation network preceding the Old Assyrian one by a thousand years (Masson 1992: 231; Pinner 1982; Wilkinson 2014c: 277). Western Iran is also characterized by a large number of painted pottery traditions, at least some of which are very textile-like in composition (for references, see Majidzadeh 1981). The growth of settlement sizes in this period and the clear rise in circulation of other materials, such as metals and precious stones, certainly suggest long-distance "trading" networks, perhaps of the low-bulk variety, but there is little direct evidence for strong vertical hierarchies associated with Mesopotamian urbanism and its cultural inheritors, or indeed with the "barbarian" form of wealth concentration seen north of the Caucasus. On current evidence, and if we exclude those areas in the southwest (e.g., Susiana) that were closely linked to developments in Mesopotamia, it seems plausible that the situation in much of fourth millennium Iran represented something between that of Anatolia and Mesopotamia, where textiles were playing an increasing role as tokens of social value, perhaps over increasing distances, but that regular full-scale commodity exchange was not yet established.

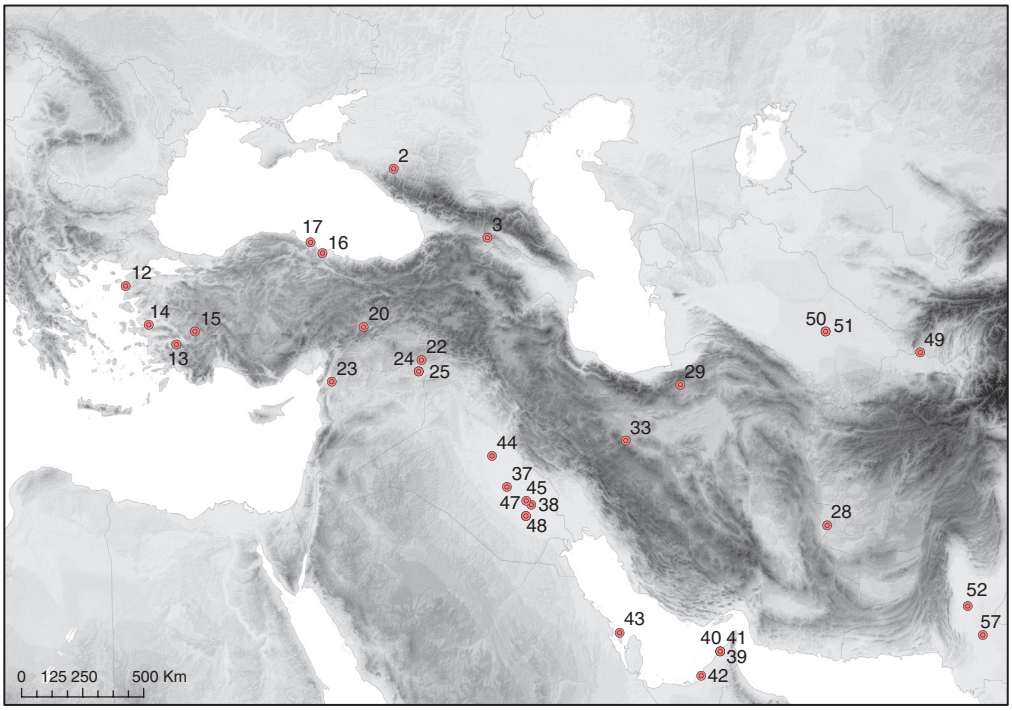
If the situation is complex and heterogeneous in the fourth millennium BC, the (later) third millennium seems to represent an era of convergence, at least for certain regions discussed in this chapter. Curiously, in the distribution of actual textile remains in the archaeological record, there is a shift from a north-south orientation of the finds from the fourth millennium (Figure 2.1),



2.1. Distribution of archaeological textile fragments in the Near East/Eurasia, fifth and fourth millennium BC (for key to numbers see https://gitlab.com/tcwilkinson/threads-of-eurasia-figs/blob/master/b/TABB-3_sites_reducedprecision.xlsx (accessed November 15, 2017); cf. Wilkinson 2014c: 397–398).

to an east-west one from the third millennium (Figure 2.2). This pattern could easily, of course, be an artifact of archaeological research interests rather than an index of any shifting emphasis on textile circulation (because it is far from clear if any of these are "imports"/"exports"), but other proxy evidence does give an overall picture of rising industrialization of textile production and an increasing emphasis on east-west–orientated over north-south interaction. To begin with, the earliest systematic texts from Mesopotamia of the late third millennium (e.g., in Ebla and in Ur III archives) record the production and administration of vast amounts of woven, probably mostly woolen, cloth in factories (e.g., see Biga 2010; Waetzoldt 2010). Though impressive in the scale of the enterprise they record, especially the numbers of people and animals involved, these texts, like the later Old Assyrian ones, give little information about the eventual destination or context of use for the final cloth products. Instead, the focus is almost entirely on production and occasionally on the immediate recipients of the stock (e.g., officials, royalty, ambassadors). Again, it is impossible to say whether most items were garments or other types of cloth.

It seems, however, on the basis of a number of clues, that at least some classes of textiles were being distributed very widely. First, hints in the Mesopotamian texts of transfers to merchants, or to visiting "ambassadors" suggest circulation



2.2. Distribution of archaeological textile fragments in the Near East/Eurasia, third millennium BC (for key to numbers see https://gitlab.com/tcwilkinson/threads-of-eurasia-figs/blob/master/b/TABB-3_sites_reducedprecision.xlsx (accessed November 15, 2017); cf. Wilkinson 2014c: 397–398).

at least on an elite level if not also at a middle entrepreneurial rung (Biga 2010: 148, 163), and in practice being calculated in terms of trading "equivalence" and exact monetary reckoning. Second, proxy evidence of material culture convergence over a very large area makes the likelihood of systematic "trade" relationships extremely high. For example, in Anatolia, a very obvious expansion of commonalities in material assemblages from Syria to the Aegean can be documented during the EBII/III period (i.e., 2400–2000 BC), which includes distinctive common pottery shapes including *depa*, tankards, and Syrian bottles (Rahmstorf 2006b; Şahoğlu 2005). The simultaneous rise of shared or interconvertible systems of weighing from the Aegean to the Indus suggest intensive contacts, presumably transacted in metals (Rahmstorf 2006a). Weighing systems imply a need for establishing trust between strangers; an abstract metal economy requires weights for exact comparisons of money and/or commodities to create that trust. Simultaneously, there is a deepening set of material relationships between Mesopotamia and other groups arranged around the Persian Gulf, represented by items such as the "intercultural chlorite vessels" (Kohl 1978b), and other eastern features, as seen in the items from the Royal Cemy at Ur (Tengberg et al. 2008). Thus although international textile trade is documented textually only in the early second millennium

Kültepe texts, the earlier material connections make it seem very plausible that the textile "trade" between Syria, Anatolia, and the Aegean – and perhaps also in a mirror image to the Persian Gulf, Iran, and Central Asia – began some centuries earlier, at least as early as 2500–2300 BC, and expanded widely on the network first explored by the earlier Uruk expansion. Additionally, the secondary urbanism of Syro-Mesopotamia starting around 2800–2600 BC, and the subsequent intensified urbanization of central Anatolian towns (2500–2300 BC) – perhaps itself documenting the emergence of local textile industries – seems to coincide with the reemergence of painted pottery traditions. This trend begins in the upper Tigris with early third millennium Scarlet Ware then in the Upper Euphrates (around 2600–2500 BC); followed by various forms of monochrome and polychrome painted pottery such as the Nuzi, Khabur, Levantine, Transcaucasian, and Aegean Kamares and Mycenaean painted wares emerging onto the scene between 2500 and 1200 BC. There is no obvious "genetic" relationship between most of these traditions, but they share decorative schemes recalling woven or embroidered patterns, and a popularity for geometric bands on otherwise plain burnished wares that may even represent the fossilization of textile bands around metal or ceramic vessels, and, thus, a new elaboration of drinking rituals (Wilkinson 2014a).

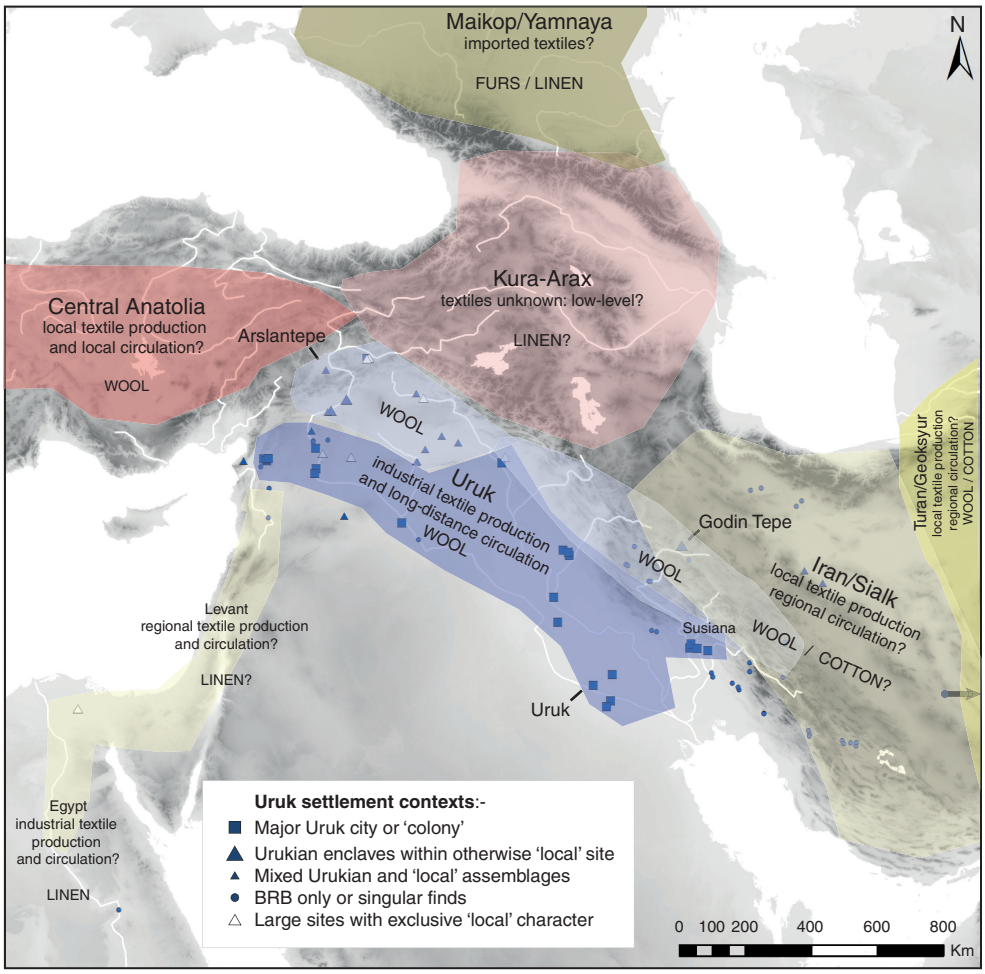
The circulation of textiles as "gifts" for neighboring elites recalls the maintenance of "house" or "lineage" reputations as seen in the Samoan case, albeit at an international level rather than a local one. If the items given in exchange were characteristic of the offering city or of particular heritage, it is also not difficult to imagine that their presentation still played on an appeal to the inalienable identity of the cloth and its biographic associations. What is different (and is confirmed by the size of sites, their location along corridors of movement, the indications for variable social ranks, and the suggestion of craft specialization) is the displacement of production labor from the realization of its social value in circulation. This represents a decisive shift toward "commodity fetishism" across a huge area of the Near East. All this suggests that whatever moral restrictions (or objections?) to the circulation of textiles between strangers had been overcome in much of this area by the middle of the third millennium BC, further systematized and expanded into monopoly treaties, palace production, and colonial trading outfits during the late third and early second millennium BC.

The link to "morality" may seem strange here, as modern economic theory places "economics" or "economic systems" outside the field of morality to justify the logic of capitalism as transcendental or universal. From an anthropological perspective, morality and economics in all societies are intimately entwined even if denied (Bloch and Parry 1989). This realization allows us to recognize the moral ambiguity posed by abstract measurement systems such as weighing systems and metal or numeric currencies to "traditional" attitudes

to rough equivalences and balancing of favors. To put it more concretely, one can simply think about everyday conversations about who is particularly mean or who is overly generous, which form common informal discourse in the public house, the teahouse, or other local gathering points across the world. Equally, we can point to the common caricature of a person who "knows the cost of everything, but the value of nothing." Between family and friends (and other equals), being overly careful about the exact amount being spent by each party is considered rude and tantamount to transforming one's relationship to that of stranger. From this view, giving every object an abstract, accounted value would be morally problematic in a well-functioning community and thus the principles of impersonal "trade" were potentially abhorrent. This is not to say that "traditional" or "preurban" economies were morally superior, merely that a clash of coexisting and overlapping human moralities around sharing, ranking, and exchange laid the foundations for the transformation of small-scale networks of circulation based on mutual obligations, into large-scale networks of trade based on mutual profit or, sometimes, exploitation.

TEXTILES AND METALS: A CONTAGIOUS NEXUS FOR URBAN TRADE?

The Near Eastern model of urban civilization has been described as a "contagious process" (Sherratt 2005), slowly incorporating communities and territory through the expansion of trade networks driven by the need for exotic raw materials. It is also one that creates a great deal of inequality that fits poorly with the kind of everyday morality of mutual help typical of small-scale exchange relationships. Intensive research devoted to the so-called Uruk Phenomenon and its expansion over the last twenty-five years has established beyond reasonable doubt the extensive reach of trade in raw materials (including metals, lapis lazuli, and wood) during the fourth millennium from the Sumerian "heartland" to the Levant, Egypt, northeast Iran, and the Caucasian steppe. This first urban system was extremely successful, facilitating a semicolonial expansion of cultural practices (Stein 1996, 1999). However, the direct geographic footprint of Uruk material culture was limited to the lowland plains of Syria and Iraq, with a few hybrid outposts in the Anatolian and Iranian highlands (Figure 2.3). The wide distribution of Bevel-Rimmed Bowls as far east as Baluchistan seems better explained as part of a spreading bread culture – still significant, but for different reasons – rather than as a complete adoption of a Urukian urban society (see Potts 2009). Urukian forms of urbanism, and indeed pre-Urukian northern variations (Lawrence and Wilkinson 2015), do not seem to have been particularly "contagious." In fact, until around 2600 BC (when we also see a secondary urbanism in much of northern Mesopotamia), most peoples of Anatolia, Transcaucasia, Iran, and the Levant continued to live lives in smaller settlement systems, seemingly organized around, to use D. Graeber's



2.3. Textile production and circulation zones, fourth millennium BC; with Late Uruk settlements and associated finds.

terminology (Graeber 2014: 130), "human economies" that emphasized the organization of personal relationships (many of them kinship based) rather than the organization (and accumulation) of goods and abstract communities. This is despite the fact these peripheries had access to the exact same craft technologies as the urban groups; indeed, in many instances (especially wool extraction and metallurgical techniques) the primary innovators in these technologies were located in these "peripheral" areas (e.g., on metallurgy, see Thornton 2009). Viewed from this crude social evolutionary perspective, it seems that conservative systems of social organization, or resilient ritual economies, nonetheless prevented the incursion of the Mesopotamian state model.

In the mid-third millennium, however, the urban model suddenly spills over into a whole range of different new regions: including parts of Anatolia,

Central Asia, and the Indus. Each region has its own characteristics of course, and the exact trajectory of and specific reasons for urbanization must be different in each case. In some regions, such as Central Asia and Anatolia, the preceding centuries are often characterized as a "proto-urban" phase. Aside from the implication of inevitability and unilinearity of social evolution – an assumption that should be used cautiously – the use of the prefix "proto" may hide a complex of rather different responses. If a prefix is necessary at all, perhaps "pseudo-" or "para-" would be better. Leaving aside local characteristics, it seems likely nonetheless that some "global" mechanism must account for the more-or-less synchronized contagion of urban life in the mid-third millennium to the wider Near East. An explosion in metal consumption in Mesopotamia, perhaps associated with the emergence of a bourgeois class or perhaps the beginning of the use of silver as regular medium of exchange, may have driven the incentive to neighboring metal-rich communities to intensify their interaction with Mesopotamia, and hence, through emulation and the incipient effects of handling and attempting to control metal flows, began to adopt the tenets of an urban and metal-oriented economy. While such quantitative thresholds in the scale of metal flows for the third millennium may have played a part, it is generally agreed that large quantities of metals were already flowing during the early to late fourth millennium (Stech 1999: 63) and in small amounts in the northern Mesopotamia/eastern Anatolia region from the late fifth millennium (Stein 2010: 28). Why then did the overall urban model not spread earlier, beyond the Mesopotamian basin and a few outlying settlements, such as Arslantepe and Godin Tepe, in the nearby highlands?

As discussed previously, a metal-oriented economy enables the abstract "liquid" valuation system we associate with modern money to quantify and measure equivalence between goods and services (with relative costs determined by the resistance to being obtained, to follow Simmel 1990). This type of economy facilitates a mobility of wealth and increasing international "trade" between strangers, and increases social complexity, population density, and the geographic reach of interaction networks. The other consequence of a metal economy is precisely in its abstraction from social relationships facilitated by its liquidity and biographic erasure – described sometimes more emotively as the "dehumanization" of economics – or less emotively, as I suggested before, the growing disjunction between the circulation of people and the circulation of objects. Seen from a nonmarket perspective, the tenets of trading in a metal economy appear "immoral" against competing values of distribution such as sharing or *xenia* hospitality to strangers. This view helps to explain the ongoing critique and moral discourse on money, debt, and hospitality as far back as it can be followed it into philosophical history (see Graeber 2014, esp. 73–126, 223–250). Many cultural groups around the Near East will have recognized this moral ambiguity, so that even while the Uruk "center" was gaining pace,

these "peripheries" instead integrated the technology of metal and textiles used by their urban neighbors in ways that prevented long-term accumulation of capital by temples, kings, or individuals. The metal economy was not easily exportable because it relied, to some unknown degree, on culturally specific organization with ritual and "moral" constraints at that time unique to Mesopotamia.

It appears plausible that the key scaler threshold toward an emphasis on a certain mode of circulation, namely trade, was crossed sometime between the late fourth and mid-third millennium, a threshold that relied on the unique role of textiles in exchange relationships. Before this time, fine textiles of various sorts may have "escaped" from Uruk contexts in small numbers into the surrounding nonurban societies, sometimes over very large distances, for example to north of the Caspian, and textile production technologies were also shared across cultural zones. Such long-distance transfers did not facilitate ongoing interdependence, however. A small number of foreign textiles could easily be inserted into restricted networks of circulation and community relationships without an apparent contradiction with traditional moralities. Low-intensity trade into nonurban spheres is what A. Sherratt emphasized when he talked about Europe being a "margin" of the world system during the Bronze Age: a cultural zone in which, to use P. Kohl's phrase, "transferable technologies" were shared (Kohl 1987), and thus were indirectly inspired or influenced, but no systematic economic interdependence was created (Sherratt 1994).

What exactly such Late Chalcolithic textiles looked like, and how they were used in a social context is, of course, difficult to say. One clue may come from the survival of wall paintings dating to Period VI A (late fourth millennium BC) at the site of Arslantepe. Here, the geometric abstract style of the figures depicted (Figure 2.4) strongly recall embroidered textile patterns. If the wall paintings represent stand-ins for wall hangings, it is easy to see how such textiles were, almost literally, woven into social architecture to create suitable spaces for ritual action in which significant exchange relationships were enacted. In this case, given the context of the paintings – at doorways in a building apparently used to administer surplus food stores (Frangipane 1997) – the exchange acts included the moments of collection and distribution of agronomic wealth, including human labor, as a chance to reinforce the nature of relations at different ranks or as equals between different groups occupying Arslantepe. We cannot be sure whether such representations recall "local" Chalcolithic or "Uruk"-style cloths, of course, or if such cloths were imported or locally manufactured. Frangipane argues that the nature of the depictions (especially the ceremonial threshing scene), which is also seen in Uruk-period seals, is a local interpretation on a southern/Urukian symbol (Frangipane 1997: 65–66). As such, these images can be seen as referring to a transferred Urukian social



2.4. Photograph of one of the wall paintings from Arslantepe, period VI A (i.e., Late Chalcolithic 5), likely to have been inspired by textile designs (adapted from Frangipane 2004: 54; see also Frangipane 1997: 66, fig. 16). Reproduced with permission of the Archive of the Italian Expedition in Eastern Anatolia, Sapienza University of Rome.

practice, which facilitated the organization of agricultural labor to enable ever-larger urban networks of exchange.

Those rare and exceptional textiles being circulated in the late fourth to early third millennium and their aura of personal relationships would have slowly become a kind of "gateway drug" into an urban metal-based economy. If individuals or groups wanted to increase their social standing by assembling and distributing more foreign cloths – that is if foreign cloths increased in "value" – then the easiest means to engage Mesopotamian traders was on their own terms: that is by conducting exchange business in metals. Once integrated into this circulation of metals, it would only take a few individuals and groups to undermine the traditional balance of power within a community and instead to emphasize accumulation and transform the basis of the economy.

It remains to be explained why this system should have emerged at this particular chronological juncture. It is possible that it was the ability to dye wool in multiple colors and, hence, to elaborate decorative schemes that boosted the social uses to which cloth could be put, as argued by McCorriston (1997, 2001) following Barber (1991: 21, 236). Perhaps it was a quantitative increase in the intensity of movement facilitated by new social institutions or new transport technologies, for example, the donkey, cart, or horse. Wool is said to preserve less well in the archaeological record than linen, due to its chemical makeup, resulting presumably in an underrepresentation in samples of actual early textiles. Whether lower durability was also recognisable within human life spans is unclear, but it is tempting to speculate on whether short cloth life

spans played a role as tool to accelerate the obsolescence of commodities as they did in the Lele *raffia* circulation; such obsolescene is characteristic too of the modern fashion system. Ultimately, beyond any technical or cultural advantage held by the urban societies, the key process would have been the scaled-up *systematic* insertion of foreign textiles into local networks of power and obligation, starting perhaps between 2800 and 2500 BC. This systematic insertion may have functioned not dissimilarly to the stimulation of trade effected by European-manufactured "trade beads" in West Africa from the fifteenth century AD onward (DeCorse 1989), in this case exchanged more-or-less directly for kidnapped locals who were then exported as slaves to the Americas. The "trade beads" mimicked materials valued by local groups, members of which apparently took the lucrative opportunity offered by the slave trade to expand their own status in a process of opening (i.e., creating) markets.

The direct evidence for textiles and textile trade is, as outlined here, rather sparse for the fifth, fourth, and third millennia BC. However, as explored in the preceding text, there is also a growing body of indirect or proxy evidence, including production evidence comprised of whorls, weights, pseudomorphs, and skeuomorphic patterns, which call for greater synthesis and more careful examination as a whole. My main hypothesis here, which clearly requires further investigation and testing, is that the success of "contagious urbanism" and the spread of societies organized around a state, relied precisely on changes in a *metal-textile circulation nexus:* Certain groups were able to take advantage of the contradictions between different moral logics regarding exchange of precious objects already present within nonurban human relationships. Both metals and textiles were used from very early on to ornament the body and thus materialize social roles on the body before the rise of urban or state societies. As human dress or "decorations" for houses, floors, and other "property," both materials allowed the comparison of ranks of human beings and their labor without abstracting them to quantitative values, unlike values given by weights in silver. In nonmarket contexts, even weaponry may have had as much a symbolic role – at least in the mortuary contexts in which archaeologists find them – as a "technical" one. As with clothing placed with the dead, the presence of a weapon in a grave sends a message in an abstract but vivid way: "this is the *kind of person* who might kill or maim you," whether the individual buried there was indeed a warrior or not. These symbols, although widely shared geographically, were nonetheless deeply dependent on locally contingent networks of rights and obligations.

TRADE AS CENTRIFUGAL FORCE OF CIVILIZATION

As metal became the default symbolic repository of value for the earliest urban groups in western Asia during the fourth millennium, an opportunity

was opened for the expansion of the kinds of "disembedding" traditions first tested by 'Ubaid groups, into more mobile and universal forms within Mesopotamia and its immediate hinterland. In contrast to other forms of currency, the use of metal as bullion allowed an abstraction of power from older networks of rights and obligations and facilitated the accumulation of redeployable wealth in physical form. As wealth became more mobile, investment in industrial production, associated at this early stage primarily with woolen textiles, became possible, simultaneously creating new demand-and-supply dynamics.

Despite this, outside of this zone, most groups in Anatolia, the Levant, Transcaucasia, and Central Asia initially resisted the new social logic, or at least deemed it irrelevant, instead appropriating new technology and objects (both metals and textiles) for purposes suitable to their own social structures. In the third millennium, an increasing trickle of imported textiles began to allow select groups in these regions to reconfigure the older networks of obligation. New "dressing" rituals, which were focused on public performance of rank, could shift or mobilize the temporality of authority, just as "wealth" was made more mobile in metal economies, to justify permanent differences. Cloths were no longer locally produced (or appropriated from outside) as wealth to be distributed in closed networks, only to *create future status*, but obtained and conspicuously consumed for the purpose of dressing bodies, vessels, and homes in generalized rituals performed in an open context that were designed to materialize and justify *already created status*. The desire for these visual tools of social manipulation expanded the need for metals and enabled the widening adoption of the metal economy and state/urban system. The result of this centrifugal process was the fitful, ultimately inexorable interdependence of an ever-wider area of the Old World and, thus, the expansion of Near Eastern "civilization" through trade.

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THREE

PRICES AND VALUES: ORIGINS AND EARLY HISTORY IN THE NEAR EAST

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INTRODUCTION

"Values" in the sense of "prices" and "justice" have been a part of human lore since the late third millennium BC, allowing one to think that they may well have been a legacy from earlier times and merely accidentally documented later because of the invention of writing. However, it is also possible that they are an artefact of the time when they first appeared and that the historical development we see corresponds to virtually the entire history of the

* This chapter is the outcome of several years of intense thinking about the origins of commerce that culminated in my employment with responsibility for the Key Topic "Economy" in the Berlin Excellence Cluster Topoi. The greatest part of the work in writing this chapter (as opposed to recognizing the questions and conceiving answers) was enabled by a fellowship with Topoi at the Humboldt-Universität in Berlin where I profited from the opportunity to try out a few thoughts with Jochen Büttner in the course of stimulating discussions related to his project on scales. The revising and final editing took place after I had shifted to my present position at the Freie Universität, but still with Topoi. I am grateful to Topoi for the chance to work on these fascinating topics, but obviously my colleagues and benefactors bear no responsibility for the resulting text. However, like all other readers, my benefactors will be grateful for the incisive comments of that patient, but anonymous, peer reviewer who made considerable efforts to grasp my point and hint at what could be done to make it less inaccessible.For my ideas on the overall Bronze Age world system, compare Warburton (2011b). For the general importance of economic integration, compare Warburton (2013a); for the problems of integrating Near Eastern economic history, compare Warburton (2011a). For some aspects of the historical developments, compare Warburton (2007b, 2014). For the larger picture, compare Warburton (2003, 2016).

phenomenon. However, even so, only archaeologists can possibly approach the issue of origins in this particular case. In fact, value has recently appeared on the archaeological agenda. Yet value glides in a kind of historical vacuum, where its origins are randomly linked to goods, cognition, social constructs, and debt as if any theoretical approach was applicable and the archaeological data immaterial.[1]

This chapter will develop on the idea that "values" understood in cultural terms are frequently related to religion, whereas for economists "values" are expressed in "market prices." It follows that "values" are the field where markets and religion meet – or should. Arguably, this difference not only hits the core of the origins of values, but also throws light on the emergence and early development of civilization.

Thus, the central aspect of the discussion here is the historical issue of how value systems emerged, developed, and diverged. It should be relatively clear that neither prices nor religious values could have had their origins in such systems as those with which we are familiar today. Yet economists and archaeologists are nevertheless inclined to believe that "equivalencies" were formed in the human head long before there were markets and systems of counting. In the same way, at least since Leroi-Gourhan, it is frequently assumed that there were doctrines and means of communicating them long before the appearance of Aristotelian logic.

In fact, what is seen in the earliest accounts of the fourth and early third millennia BC is that the managers and their superiors awarded themselves high salaries and vast powers, and ordinary people were offered little more than obligations. Yet society accepted the rules dictated by its superiors at a time when there was neither a system of equivalencies nor even the trace of any kind of coherent religious thought.

The difference between the Neolithic and the Bronze Age was the emergence of a system of equivalencies based on weights in silver. Before the fourth millennium, neither silver nor weighing of any kind was known. In the administrative texts from the end of the fourth millennium, there is no trace of equivalencies and hardly a hint at weighing. During the early centuries of the third millennium BC, the first hints of weighing and the emergence of equivalencies emerge. In contrast to the earlier era, at the end of the third millennium BC, the administrative documents of the state are full of equivalencies that appear to be commercial in character (Englund 1990: 13–55). These are real values ultimately based on making weights in silver equivalent to (1) the value of weights of wool, (2) surface areas of fields, (3) volume measures of grain, and so forth, and thus in this sense, these equivalencies (matching different means of measuring things with a weight in silver) can be called prices (and Powell understands them as real prices; Powell 1987–1990; Powell et al. 2003–2005). By the end of the third millennium BC, these prices bring large quantities of

lapis lazuli and gold into Mesopotamia; quantities that bear no comparison to earlier amounts. Significantly, these precious materials rapidly become associated with divinity and royalty.

The equivalencies were thus created during the third millennium BC, and it was likewise during that third millennium that traces of a system of values began to be seen, but this system was far from complete in the third millennium BC and did not strive to be free of contradictions (and thus cannot have been a doctrine or dogma, but was merely a never-ending work in progress; cf. Warburton 2012a).

From the second millennium onward, the equivalencies and values were negotiated. One result is that modern prices reflect mutual agreement under specific circumstances, although prices vary widely, and yet frequently it is the consumers who decide. In the opposite sense, among certain groups of people there is a consensus about specific religious values, while there is no universal agreement about their validity or even existence; however, it is generally the society (rather than individual preferences) that determines the tenor of attitudes toward belief. Evidently, neither doctrine nor discourse serves to consolidate a coherent body of thought: It is a social consensus. In this sense, at least superficially, there are two very different systems of values; yet these must have had some origin.

I argue that there is a common origin, despite the very different routes along which the two have evolved. However, the problem is not merely a question of understanding and communicating, so much as recognizing the limits of the various academic disciplines involved. Although it is increasingly fashionable to link politics and religion (in the sense of "ideology"), it is more or less inevitable that ancient markets and religion have rarely been linked, at least partly because of the strange fate of ancient markets in archaeological and economic thought (Warburton 2011a).

THE BRONZE AGE NEAR EAST

Cunningham (2013) stresses that the Sumerian religion – the earliest known – was anchored in the administration of the economy with the Eanna complex confirming that it had been that way since at least the middle of the fourth millennium BC. Given the archaeological evidence, as there are no comparable buildings or cities anywhere except in Mesopotamia up to this point in time, it follows that that urban economy was the first of its kind in human history.

Although it is possible that there were earlier forms of religion, these certainly cannot have been similar to the religions of subsequent eras because the evidence of a transformation within the Bronze Age is absolutely clear, as evidenced, for example, by conceptual categories such as Osiris and Isis who

appeared in the mid-third millennium. It is also clear that there was some kind of change that made the gods of Classical Greece profoundly different from those of Bronze Age Egypt and Mesopotamia (for discussions cf. e.g., Warburton 2012a, 2013b).

It is significant that, although bits of myth, ritual, and temples exist, scholars are constantly bemoaning the fact that these earliest civilizations "have bequeathed to posterity no theological treatises or surveys of their beliefs," as Beckman (2013: 84) cogently notes of the Hittites. Given the sheer volume of the material preserved, the comprehensive absence of such texts (from any Bronze Age civilization) means that such treatises were not important in these early religions. The same is true of economics, where there is a wealth of administrative sources, but no economic treatises from the Bronze Age. Needless to say, what has been composed about ideology is based on texts relating to religion, governance, and economics. The absence of treatises that separate religion, politics, and economics suggest that religious practice and economic policy go hand in hand throughout the Bronze Age. Although this point is recognized as being significant for political history (e.g., Gundlach 1998), its importance for religion and economics is rarely appreciated to the same degree.

It is logical that when searching for religion in the Bronze Age, scholars disregard the economic evidence and stress "myths," "rituals," and "incantations" based upon the later understanding of religion. Yet the roots of this tradition of isolating certain categories do not necessarily lie in early Antiquity because there are no extant treatises, so much as in our drawing on the assumptions of the discipline of the study of religion. In addition, the methodology of students of religion and archaeology buttresses the argument that this is religion and is to be separated from economics. Yet the logic of the texts suggests that Bronze Age religion was not a separate category and that the economic sources are relevant to that religion.

By following the logic of the study of religion, the developments of the Bronze Age are eclipsed because the basic definitions of the students of religion are founded on the later religions with which they are familiar, but these are not necessarily relevant to the Bronze Age. When examining the material from prehistory, they (e.g., Geertz 2013) will naturally recognize the patterns with which they are familiar, and the prehistorians (e.g., Mithen 1999) will follow in the same path. This method means that assumptions about abstract "values" will simply be postulated by students of religion and prehistory alike. Yet, in doing so, both the prehistorians and the students of religion disregard the study of the Bronze Age, and, in this particular case, this approach might be an inappropriate case of telescoping developments because it effectively means disregarding precisely those texts that might throw light on the earliest human confrontation with abstraction.

Obviously, the issue of "value" is among the most abstract and the most fundamental of concepts, and thus its origins are well worth exploring rather than projecting. I argue that the evidence suggests that the interregional ties in the Bronze Age were far deeper and more intense than was suspected a half-century ago and close to what was thought a century ago (e.g., Warburton 2011b, 2013b). This contact implies trade across boundaries, which cannot be under anyone's control. Thus, the case of "prices" and "values" might be relevant to suggesting that the origins lie precisely in the Early Bronze Age. It could in turn be argued that the understanding of values is not some inherent part of human nature, as assumed by students of religion who postulate values, and economists who follow Adam Smith in assuming a natural tendency to trade. Instead, it might well be an artifact created in the course of the Bronze Age. My aim here is to explore some of what comprises the relevant evidence.

The System of Measurement

Powell (1987–1990) suggests that most of the earliest systems of measurement can be traced back to the earliest texts of the fourth millennium, and Englund (1998) confirms this observation. What is significant is that hitherto the later – third millennium – systems of measuring weight are not known in the earliest texts from the fourth millennium BC.[2] Powell suggests that the system of weight might go back to ED II, which might mean somewhere around or after 2700 BC. In the Mesopotamian system as it existed from the end of the third millennium, weight was organized on the following principle: 180 grains = 1 *sheqel* (ca. 8.33 g); 60 *sheqels* = 1 *mina* (ca. 500 g); 60 *minas* = 1 talant (ca. 30 kg). Powell points out that in this system the value of the grain is merely a mathematical fiction. Once the *sheqel* was recognized, it was arbitrarily established that 3*60 grains = 180 = 1 *sheqel* – a late addition to the system that allowed it somehow to be related to the sexagesimal system. It is probably the *mina* that lies at the base. Powell (1987–1990: 508) points out that the Sumerian term *ma.na* must be derived from the Semitic *manûm*, derived from the verb, "to count," meaning that both the Sumerian *ma.na* and the Greek μνᾶ/*mina* are derived from the Akkadian *manûm*.[3]

Thus, this concept of weighing has a single origin, and it does not date back to the fourth millennium.

For our purposes, it is extremely important that standardized systems of value based on weights offering the possibility of equivalency values probably did not exist before the emergence of the first states with their systems of administration. As late as the early fourth millennium BC, there was still no real concept of measuring anything (except perhaps time and even something as elementary as the length of the year was left unsolved until Hellenistic times).

Equivalencies and States

It is important to bear in mind that despite the importance of the markets, virtually all systems of coinage and measurement are related to states (or at least political offices), and the accumulation of vast reserves of precious materials (as, e.g., archaeologically visible in the Royal Cemetery at Ur and in the literature by, e.g., the treasures Alexander recovered in Persia according to Arrian Book III and Plutarch – aside from the Parthenon treasures as described by Thucydides Book II, chapter 6) is also usually an attribute associated with states. This connection is partly related to the security that the state offers, but also to the treasuries associated with the institutions and highest officials. However, the states could not dictate the terms of access to precious materials in distant lands. Only within their own territories could they dictate or administer access. Because virtually all of the prestige items in the Near Eastern Bronze Age were imports, it follows that somehow they reached the core states through trade. The large quantities reaching the Near East during the Bronze Age suggest that the interest in consuming matched an interest in producing, thus, "demand and supply." This market-based "demand and supply" was pushed by the greed of the emerging states. However, the consumers in the powerful states must have had something to offer if they could persuade the producers in the distant periphery to supply larger quantities. Yet, of course, the Mesopotamian institutions had virtually nothing more than what lay around in Mesopotamia, which was basically reeds and clay.[4]

Yet somehow, gold, silver, lapis lazuli, carnelian, wood, building materials, and milling stones all arrived in Mesopotamia. What is known from the texts is that they exported grain, oil, and textiles. However, in a world of "subsistence" agricultural economies, sending grain to Afghanistan to acquire lapis lazuli could not possibly have been very useful. Thus, it would be logical to assume that the lapis lazuli was acquired with some other material, and here silver is documented later.

Significantly, silver is virtually absent from the archaeological record much before the Bronze Age (Hartung 2001: figure 56, facing p. 312; Moorey 1999: 235–236; Prag 1978; Reiter 1997: 76), and yet, within centuries of the beginning of the Bronze Age, silver serves as "money." The precondition for market-based prices is the development of a system whereby value can be estimated in terms of an exchange value that allows the estimation of an exchange equivalency for products that are distinctly different.

From the centuries around the middle of the third millennium, this was based on managing to make equivalencies by relating weights of silver to weights of, for example, lapis or carnelian, or to volumes of, for example, grain or oil. How this came about is a bit mysterious, as it is a leap that goes far beyond what is present in the earliest systems of measurement (of the late

fourth millennium). These earliest systems of measurement were an extraordinary accomplishment, as they created systems for counting and measuring time, capacity, and area, and they could indeed relate crop yields to area and time (and presumably workers to time as well). It is rather obvious that the entire system of early measurements was created by the bureaucrats of the institutions (who also created bureaucracy). However, those early bureaucrats did not need any equivalencies, and there is little or no evidence of such in the earliest texts (Englund 1998). The commercial equivalencies appear abundantly in the administrative texts of the Ur III period a millennia later (at the end of the third millennium, Englund 1990: 13–55) and are characteristic of all later administrative texts. In this sense, the equivalencies were cautiously and gradually developed during the late Early Dynastic era (ca. second quarter of third millennium BC), improved during the period of the Empire of Agade and blossom forth from the Ur III period onward (together roughly second half of third millennium BC). Thus, I argue that what one can see from the texts is that the concept of "equivalencies" appeared and evolved during (and after) the Bronze Age. It follows that the concept of trade as it developed in the Bronze Age was very closely related to the emergence of markets, and that the market prices and values appeared together.

However, this does not do more than provide a context; by 3100 BC, there are measures, and ca. 2600 BC, there are weights and equivalencies. By the middle of the third millennium, equivalencies theoretically measured in weights of silver were established by the scribes of Mesopotamia and Egypt, so that the value of land, grain, and labor could be estimated in silver (Gelb et al. 1991; Powell et al. 2003–2005; Stol et al. 1993–1994). Prices could be expressed using one of the words for "price" (e.g., "commercial price": Akkadian *šīmu* and Egyptian *swn.t*, which are incidentally probably etymologically the same word; among other words, the Akkadian also has the term "market price," *maḫīru*). Yet, very commonly, the texts render the process concrete, by stating that the price of a given group of goods is defined as being "its – or their – silver" (both in Akkadian and Egyptian: *kasapša*; *pȝγ = f ḥḏ*). Significantly, the quantities of silver and lapis lazuli present in Mesopotamia increase explosively in the second half of the third millennium BC.[5]

Thus, silver had a crucial role, pushing an inflow of precious materials into the core lands of the Near East almost from the moment it arrived. However, it is not known why the exchange values were created and why they would have this impact. I would argue that a major role was played during those early centuries of the Bronze Age when the institutions became established features, and thus, the origins of the market lie in the early states.

The key probably lies in a peculiarity of those early centuries. As noted, during the Uruk period, the institutions simply demanded labor, taxes, and rent without worrying about equivalency values. The institutions would have

judged what they required and been less concerned about just how much abuse people would tolerate; after all, they could dictate.

The bureaucrats' only problem was counting the income. They could also pay others to ensure that people behaved. These administrative transactions may be the key to how markets and equivalencies appeared.

It was one thing to demand of peasants that they pay. It was a completely different matter to employ "policemen" to assure that the peasants behaved. At the same time, there might well have been state dependents who had to be issued rations because they had no families who could support them. Obviously, such people could not be offered the large allowances the bureaucrats awarded themselves and the still larger ones they passed on to their superiors.

Arguably, it would only have been with the distribution of wages, salaries, and rations to individuals by the state that the concept of wages would have appeared, and doubtless, the values will have initially been quite arbitrary. Up to this point, the state would have made demands. Quantifying expenses would doubtless only have become important as some members of the lower classes of society were being remunerated. Earlier, the upper class of bureaucrats would doubtless have been rewarding themselves generously with the take from the peasants (which would probably not have required detailed measurements). Once peasants and others had to be allowed rations, it was obviously essential that these be measured out very carefully and parsimoniously.

The earliest traces of prewriting bookkeeping may indeed have been dedicated to tracking the long-distance movements of shepherds, sheep, and goats. It is quite evident that this bookkeeping was gradually transformed into something much more important from the beginning of the second half of the fourth millennium onward. At some point, the rations and wages had to be counted. Yet, as long as the measures were in grain, there should not have been any difficulties in calculating and making the payments.

Of extreme interest here is the fact that the unit that is termed a *mina* (adopted by the Greeks and then modern researchers from the Mesopotamian) is the word used for the wool-rations issued in Pre-Sargonic Lagash, more than five centuries after the archaic texts. The suggestion that the Greek unit is the same is based not only on the etymology (Sumerian *ma.na*, Akkadian *manûm*, Greek μνᾶ), but also the weight of 500 grams. Wool was measured by weight, not with the volume measures used for grain rations, and so forth.

Of the use of this weight in the earliest texts, Prentice remarks:

> The lowest adult amount issued was either 2 mana of wool, or a garment made of 1 mana … Those who received the largest amounts of wool (7 mana and 5 mana) belong to a small number of occupations … The garments are described as being made from 1 mana (du 1) of wool and therefore represent less wool than a 2 mana ration, so a garment might be the lowest adult wool ration. (Prentice 2010: 85–86)

Prentice lists the professions receiving the most as including cupbearer, gardener, ploughman, shepherd, and brewer. Those receiving four *minas* were overseers; those receiving three *minas* are "craftsmen," dependents, and some who worked with pigs and fish; "the girl who feeds the goats received two mana" as did a number of craftsmen, fishermen, and doorkeepers. Those receiving the minimum were the worst off, whether grinding corn and malt, or carrying things. The children (presumably orphans), were still worse off as they "all received half a mana of wool" (Prentice 2010: 84).

Prentice (2010: 85) begins by suggesting that the minimum wool ration "may have represented the minimum required for the period until the next wool ration." She then mentions status and prestige, which is appropriate: on the list, those with the largest wool rations are well off and their clothes probably did not wear out at a rate significantly greater than the others. Thus, this value unit was awarded to people on the basis of their material "value" in the society, but thus far in purely concrete terms. It is worth stressing that while the use of wool measured by weight takes us into a new domain, the titles Prentice lists do not take us to the highest levels of society, meaning either that they are simply not in the documentation preserved or that their remuneration or allowances were dealt with differently.

Interestingly, something that looks like this same word also appears in Ancient Egyptian; it is first documented a half millennium later and was used to measure a standard wage. In this case, it appears as the *mn.w*/*mn.t* (depending upon whether it is read as having a masculine or feminine ending – which is not invariably clear from the texts) of the Middle Kingdom (during the first quarter of the second millennium BC, but it could have existed earlier). Mueller remarks:

> A word *mnt* [the hieratic can also be read *mn.w* – DAW] with the meaning "fixed amount" or "share" would certainly suit both documents [discussed in Mueller's article] and supply a fitting name for the basic wages on which the Egyptian system of compensation apparently rested. (Mueller 1975: 259)

Again, the system of distribution is the same, with multiples of the unit being used to determine the income of the ones who earned more; and indeed, one of the surviving sources from Egypt reaches its highest multiple with a court official receiving twenty times the minimum wage. However, there is a major difference in that – as we find in Egypt – it is used as a means of calculating daily income (usually defined in loaves) whereas in Mesopotamia it was used to define annual or semiannual allocations of wool.

Yet it can legitimately be concluded that this Semitic word that appears in Sumerian and Egyptian is a basic measure used to estimate (1) the value of a certain quantity and quality of labor in terms of (2) a certain quantity of a

good. Thus, once having defined the rates arbitrarily, the bureaucrats apparently then simply allowed for the higher echelons a proportionately greater amount of the basic unit offered to the lowest adult recipients so that the higher levels would receive 2, 3, 4, 5, 7, 10, 15, 20, 100, or 200 times the rate given to the unskilled with half given to the defenseless orphans.

It is not clear that the meaning of the *mina* as a unit of weight was decisive during the first part of the third millennium, even if it became such by the middle of the third millennium in Mesopotamia in the form that was later adopted in Greece. However, a unit of wool amounting to a rough weight or quantity of wool used as wages was doubtless the origin in the early third millennium in Mesopotamia. Centuries later, in Egypt, it was used to designate a single unit of wages, and thus the principle was similar but not the details. I would suggest that the origins of the unit of one *mina* lay in the measure of the compensation of a single unskilled laborer. The origin probably lies in a weight of wool, but for salary purposes, this was later transformed into a weight in silver (and one *mina* of silver was effectively, for instance, the annual salary of an astronomer in first millennium BC Babylon).

The original procedure did not require any abstract intermediary concepts; the ratios could simply have been dictated. Nor does the original procedure take us to the level of estimating equivalencies between two commodities. While simplifying the matter of paying the wages of the policemen and orphans, it did, however, create a problem for measuring the income of the higher echelons. This issue meant that either some of the higher earners would have received large quantities of goods that they did not require or the state had to establish some equivalencies to give them something more useful. It is known that "something" soon turned out to be silver, but the state institutions still had to acquire the silver. Originally, the procedure was a relatively simple calculation; within centuries, this was transformed, in two different ways, firstly with the gradual emergence of the concept of a basic wage and, secondly, with an unintended consequence.

Already decades ago, Heimpel (1987) identified the imports into Mesopotamia of precious materials (gold, lapis lazuli, carnelian, etc. – and silver) from the third millennium onward – but also a perceptible shift in exports from Mesopotamia of raw wool in the third millennium to textiles in the second millennium. Breniquet and Michel (2014) have since offered considerable detail about the development of the Bronze Age textile industries (and I have touched on the textile trade, Warburton 2012b). It would appear that the emergence and investment in the Bronze Age institutional textile industry in the urban centers was the direct result of the successful dumping of finished textiles onto the markets of the periphery, bringing in silver, which was then used to acquire precious materials as well. In this sense, the production and processing of wool into textiles fueled economic growth – and became

the basis for the massive employment. Decades ago, Waetzoldt (1987: 118) remarked of the Neo-Sumerian textile industry, four millennia ago:

> One text, for instance, records the issue of 1148 talents (about 34440 kilograms) of wool to the slave women and slaves of Ur … there would have been 17220 … or … 22960 individuals who received rations. The number of persons who received rations at Ur must, however, have been considerably higher than this … Even allowing for the uncertainties of transforming ancient metrological data into modern terms, this amount of barley [for rations] would fill about eight hundred twenty-ton freight cars.

Indeed, Waetzoldt (1987: 119) suggests that in the Neo-Sumerian economy, the number of state dependents "may even have reached half a million individuals," many producing second-rate textiles for export to acquire silver. Thus the textile industry was a major undertaking, determining not only imports but also the entire organization of society.

Regardless of whether the institutions offered huge piles of superfluous wool to their dependents or sold the wool (and/or processed textiles) to get silver, the decision of the institutions pushed the growth of the markets. Either the state dependents or the state institutions would have had to go to the markets to acquire what they wanted. As a result of the combinations of the various actions, the institutions certainly contributed massively to the creation of both viable markets and equivalency values.

For the bureaucrats to be able to pay themselves in silver, the institutions had to acquire silver by trading wool or grain. This automatically meant a conscious decision, realizing that wasting grain on orphans would not be reasonable if this drove down the amount of silver that could be acquired. Thus, the wages of the defenseless and useless were depressed. In the same way, the bureaucrats will not have wanted to offer too much grain to the merchants – unless of course they were in a hurry to get silver. As the institutions sought silver – realizing that this metal could be used as a medium of exchange far more useful than grain – they would have been further driven to establish equivalencies that were fundamentally different from wages, where the rates could be determined arbitrarily. Yet the origins would have been in the wages and rations that offered the minimum values. In addition, at the very beginning, the concepts of "weight" and "equivalency" could not have played a role similar to that which rapidly evolved.

In terms of weight, a sheep will have produced around 1 kg of wool (or ca. two *minas* of wool with the later system of weights). If the weight was the fundamental value, one would expect it to correspond to the unit produced by a sheep or collected from a shepherd from each sheep entrusted to him. Neither assumption appears to be justified. The numbers of sheep and the quantities of

wool do not work out to systems based on a *mina* of 500 grams as being related to taxation or production. Yet, from these early texts from Lagash, the *mina* does seem to correspond to the basic minimum "ration" or "wage" of the one adult at the lowest end of the pay scale. In this sense, the *mina* of wool originally formed the basis for the multiples for those higher up in the hierarchy.

The disposal of excess income by state dependents would have pushed the emergence of the market and the profession of "trader." Given their unique position, the traders would have been very concerned about profits that, in their turn, depend upon understanding prices and costs. Given the links between the landowners of the elite and the traders who could transform grain into silver, these would have had an "unholy alliance" that threatened the ordinary members of society who would merely have been concerned about their own lives and less about power or profits.

Eventually, this procedure opened the way for a market wage allowing an individual to decide that sacrificing his or her leisure for work could be profitable. However, the concept of wage labor leaving options for the purchase of goods did not really arrive for ordinary people until the nineteenth century AD. Before then, wages for unskilled labor would have been pushed down by these very procedures of estimating value and remuneration. Yet for the elites – from the third millennium onward – this concept would have contributed to the emergence of the understanding of "consumer value" in terms of "equivalencies" and "equilibrium"/"balance," as they would have had a wide spectrum of goods to purchase and a means of estimating value, quite aside from the means of acquiring goods because they had the silver.

Kings, Gods, Preciosities, and Markets

One place where prices and values coincided in Antiquity appears in the ideology of the protection that rulers offered to the weak in the face of the strong, which can be found in the claims of everyone from Hammurabi down to the provincial officials of Egypt. In the case of Hammurabi of the First Dynasty of Babylon (ca. middle first half of the second millennium BC), he claims:

> When lofty Anum ... [and] Enlil ... established ... an enduring kingship ... at that time Anum and Enlil named me to promote the welfare of the people, me Hammurabi, the devout, god-fearing prince, to cause justice to prevail in the land, to destroy the wicked and the evil, that the strong might not oppress the weak. (Th. J. Meek in Pritchard 1969: 164)

One tends to view such claims with a jaundiced eye and let them slide by unthinkingly, but even if one lingers over the lines for a couple of seconds, one involuntarily tends to think in terms of simple brutality. However, when the princes of antiquity refer to protecting the "weak" from the "strong," there are

good reasons for believing that, in many cases, this can be understood economically, in terms of "rich" and "poor." For example, there can be no doubt that among the most important instruments of public policy in the Ancient Near East was the cancellation of debts.

Toward the end the First Dynasty of Babylon, near the middle of the second millennium BC, Ammiṣaduqa decreed:

> The arrears of the farming agents, the shepherds, and other crown tributaries … their payments are herewith remitted …
>
> Whoever has given barley or silver to an Akkadian or an Amorite as an interest bearing loan … he may not collect the barley or silver …
>
> A creditor may not sue against the house of an Akkadian or an Amorite for whatever he had loaned him; should he sue for payment, he shall die. (J. J. Finkelstein in Pritchard 1969: 526–527)

Obviously, these royal measures represented propaganda aimed at calming the masses, or at least the target audience of the elite who interested the king, and reconciling them to the idea that opposition was not only futile but also superfluous. Furthermore, these measures indicate that the market economy played a fundamental role in society, otherwise people could not fall into debt and allow others to collect interest: The state was simply responding to the reality of the market. In addition, the power of the creditors was greater than that of the debtors. This power structure obviously means that the market and money had a very powerful effect on the lives of rulers, bankers, and peasants.

Clearly, these debt cancellations were a means of undermining the power of the merchants (i.e., the "strong"). Because a great deal of their income and wealth would have been a direct result of the administrative transactions of the institutions, the merchants were not in a position to complain. Thus, the kings were not defanging a potential rival, but rather pursuing populist measures against foes who had no choice but to acquiesce and get on with money making. Evidently, the merchants continued to do so until the time of Aristotle, demonstrating that the policies and the concerns of the elite were irrelevant to the behavior of the merchants. Yet, in the course of the debate in modern academic circles about the ancient economies, the importance of "prices" as an expression of "value" was neglected as if the prices were irrelevant because there were no markets.

In the case of the texts framing the Codex Hammurabi – among the most important literary creations of early Antiquity – an expression of fundamental social values can be found. In the text of the laws, there is terminology related to market activity. However, there are also links between the rulers and the gods found in references to the heaps of valuables piled high in the temples of those gods who guarantee kingship and justice. In the case of Hammurabi,

he not only stresses his laws protecting the weak, but also the treasures turned over to the gods

> The one who rebuilt Ebabbar for Shamash ... who made riches abound for Anum and Inanna ... who makes the temple of Egalmah abound with affluence ... who has surrounded Emete-ursag with splendour … [Hammurabi is himself] … the lord, adorned with sceptre and crown ... the wise one, the administrator ... the savior of his people from distress ... who makes law prevail (Th. J. Meek in Pritchard 1969: 164–165)

Thus, the treasures known from the "royal" cemetery at Ur in the middle and late third millennium BC can be related to concepts of sovereignty. At that time, however, there are no texts that could explain what these articles mean. Yet, by the middle of the second millennium, treasures were also within the domain of the gods who selected the kings who would perform justice. From the early part of the third millennium, there are no concepts of justice expressed in similar terms anywhere and, from the middle, there are little more than general assertions. By early in the second millennium, the protestations linking valuable artifacts, gods, and values have become ubiquitous.

Fortunately, the archives of the second millennium palace at Mari had the salutary effect of demonstrating that the market for lapis lazuli determined what the kings at Mari could offer to the gods. When comparing the Syrian prices with those from Eshnunna and Anatolia, Michel (2001a, 2001b) could confidently remark that the price of the lapis lazuli brought to Anatolia by the Assyrian traders reflected not only the quality of the stones but also the distance traveled. The price rose once it crossed the Iranian borders, being progressively more expensive after it left Susa and arrived in the mountainous border lands leading to the Mesopotamian plains; the price rose still further when taken to Assur and Anatolia. It is unclear what the price was in either Afghanistan or Egypt, but it is certain that the price effectively skyrocketed when approaching the heartland of the Near East.[6]

The farther one got from the Iranian borders (and the sources, from the Mesopotamian standpoint), the higher the price. It was relatively clear that such a phenomenon could be linked to the demand and supply usually associated with market prices. Thus, the luxury article lapis lazuli had a market price, at least partially related to scarcity. Yet this is not unusual; virtually everything in the Near East had a price, from sandals to a Book of the Dead (Janssen 1975).

Significantly, although lapis lazuli traversed the entire ancient world from Afghanistan to the Aegean, the truly exquisite craftsmanship of lapis lazuli working is found in southern Mesopotamia and Egypt. Strikingly, virtually all the lapis lazuli found in Mycenaean Greece consists of sculpted imports from Egypt and the Near East (Cline 1994). Thus, the material was highly prized and delicately carved precisely in the core regions of the Ancient Near East. It

was the value of the stones that lay at the base of the appreciation of the artistically outstanding objects. It was in the workshops supplying the elite (for their palaces, temples, and cemeteries) that the most wonderful objects of lapis lazuli were made. The pleasure in – and attention to – detail visible in cylinder seals, inlays, and figurines is striking and contrasts starkly with the rather crude use of the same stone in the areas on the periphery of the center. Yet the workmanship was local whereas the price resulted from the demand for the raw material. Thus, the demand of the Sumerians and Akkadians for masterfully carved artwork drove up the price of the raw material lapis lazuli, endowing it with a prestige value that was accepted and shared in Anatolia, Crete, and Egypt – a value that was expressed in market prices.[7]

Thus, the precious stones appear in third millennium Pre-Palatial Crete. In the second millennium, however, market prices of the raw materials were apparently so high that – in the Mycenaean Aegean world – glass paste substituted for the stone (with glass taking both name and function); lapis lazuli is virtually absent. The few bits of lapis lazuli in the second millennium Aegean are largely Near Eastern seals that it would have been impossible to rework again without destroying the object. Such seals were virtually useless in the Near East, but it seems that these useless items could somehow be sold as valuable trinkets in the Aegean. However, the rarity of the finds implies that most chose not to purchase anything at all rather than to use the discarded cylinder seals as beads in necklaces or bracelets. In this sense, the riches of the Orient were truly "beyond price," but only for the European princelings. The Mesopotamians and the Egyptians enjoyed an abundance of well-worked high-quality lapis lazuli that had no contemporary parallels, save in the jade work of China.

In fact, however, the fundamental role of these valuable trinkets went far beyond the abstract concept of justice. Among the striking features of the Near Eastern languages is the fact that the word for "dark blue" was the word for lapis lazuli used as an adjective or a metaphor. In the Near East, lapis lazuli was, however, far more, being an attribute of the gods and princes. In Egypt, lapis lazuli was likewise associated with the other precious metals and stones – and the gods. Precious materials were used to make statues of the gods, and then those materials became attributes of the gods (so that, e.g., divine bones are described as "silver"). One can easily understand the system whereby the poets looking at the royal adornment and the divine statues would have realized that gold was "yellow," silver was "white," lapis lazuli was "dark blue," turquoise and amethyst were "light blue," and carnelian was "red." It was thus that, as a loanword, the Akkadian *uqnu* (for lapis lazuli) was incorporated into Classical Greek as *kyaneos* (for dark blue – but taken from the Mycenaean word for blue glass paste, cf. Warburton 2008). In this sense, the precious materials entered into a system of abstraction (justice, divinity, colors) and a system of financial

equivalencies forming prices (influenced by scarcity with a value expressed in silver).

Core-Periphery Relations, Labor, and Compensations

The concept of the core region then takes on a real meaning when it is recognized that the values were conceived and diffused from there: The periphery could take them or leave them, but the values were established in the core. The result was that it was worth it for the princes in distant Afghanistan to arrange that the lapis be mined so that it could be sent to the Near East. For the princes in the peripheral Aegean, it was simply not worth the expenditure necessary to acquire lapis on the market, and they were instead content with importing Baltic amber in large quantities. For the princes of the Near East, amber had few attractions as they had both gold and lapis lazuli, which their wealth enabled them to acquire on the market.[8]

However, in Antiquity, this core-periphery system did not rely on technological dominance in the core. The Mesopotamians exported agricultural products – wool, textiles, sesame oil, and grain – and imported metals and precious stones, as well as building materials such as wood and useful items such as grinding stones (cf. e.g., Heimpel 1987). Evidently, the technological superiority was in the periphery where the technology of mining and metallurgy represented not only the most modern industries of the world at the time, but also set standards that would not be overtaken until recent centuries (Yener 2000). By contrast, there were some important Early Bronze Age urban innovations in spinning (e.g., Jones 2008), but in essence spinning and weaving dated back to the Neolithic. It was only the ruthless exploitation of labor that enabled the south Mesopotamian Sumerian textile industry to outperform in the massive overproduction of second rate textiles for export (Waetzoldt 1972, 1987), and it would be copied by institutions as far off as Mycenaean Greece (Ventris and Chadwick 1956; Warburton 2012b).

This aspect is complemented by another detail that is extremely important for the understanding of Bronze Age antiquity: The value of craftsmanship did not seem to change the retail value of the object. Understanding this discrepancy is extremely difficult for students familiar with modern Western conceptions of economics (based as they are on labor value). For most of us, one of the most striking aspects of the modern Near East is the idea that in the *sūq*, objects of silver are sold by weight, regardless of the quality of the craftsmanship. One should recall this detail when noting that among the less celebrated treasures of Ancient Egypt is a group of exquisitely worked silver cups, found together with other imports from Western Asia in a foundation deposit in the temple of Tod in Upper Egypt. They can probably be dated to the reign of Amenemhat II of Dynasty XII, somewhere around 1800 BC.

The find is, however, not as significant as the fact that the cups were originally found "flattened and folded like linen" (as the excavators put it, quoted Warburton 2007a: 191n59).

It is thus hardly surprising that examinations of the prices of metal in the Ancient Near East invariably seem to conclude that the "value" of the metal corresponded to its "price," which was dictated by its weight, and that the work involved in creating a piece did not seem to play a role, although this situation confuses modern scholars (cf. Janssen 1975; Reiter 1997: 25–26). It was the raw material, for instance, gold, silver, or lapis, which had value. The prices for lapis lazuli are expressed in terms of silver, meaning the weight of the silver that had to be paid for the lapis lazuli. Seemingly, the fact that an object had been worked did not seem to have an impact on its value (Warburton 2007a). Although craftsmen were rewarded for their work, this work did not seem to increase the price of the object.[9]

Today, the Aegean-style silver cups have been restored to their former glory, but for Amenemhat – and evidently for the gods as well – the value lay in the metal alone. That value delivered to the gods was an expression of "exchange value." And it is precisely this exchange value that characterized the treasures offered by Hammurabi to the gods, and it was linked to the concept of justice and righteous government. Thus, not much is known about An's personification of the values of the Babylonian nation in contrast to suggestions by historians of religion, such as Sweeney (in Salzman and Sweeney 2013: 25) who asserts that the Bronze Age civilizations understood their gods as "ideal expressions or personifications of the values and character of their nations" – but it is known that he enjoyed great quantities of worldly riches in his temples in both Babylon and Assur. The offerings had a tangible value, and in exchange for these offerings and the performance of justice, the gods offered sovereignty. Likewise, the performance of justice was expressed in the market prices stipulated as fines in the laws of Hammurabi, as much as in the debt annulations that protected the "weak" from the "strong." Thus, market values were fundamental to the formation and expression of absolute, abstract, moral values.

THE ORIGINS OF ABSTRACTION AND VALUE

In the millennia after the beginning of the Near Eastern Bronze Age, the precious materials – gold, lapis lazuli, and carnelian – worked by the craftsmen gave rise to what became abstract color terminology, for example, yellow, blue, and red. The values of the elite determined the values of society: expressed in statues, jewelry, and the poetry where gold, lapis lazuli, and carnelian were the affirmation of value and not representatives or equivalents to value. In this sense, there was no abstraction and no equivalency. In the academic discussions of these texts, the importance of the market elements has been easily disregarded

because it was not clearly stated in the original texts and the general academic atmosphere meant that there was no reason to think about the market.

However, the issue of "value" implies "abstraction," and I would argue that the "equivalencies" played a crucial role in the formation of "prices," which are the necessary precursor to abstract "values." In this sense, I argue that the emergence of verbal abstraction, which is the only form that can be communicated socially, depends upon the creation of concrete equivalencies, and the independent existence of verbal abstraction cannot simply be posited, as is frequently the case when scholars are confronted with prehistoric art.

Money and Values

During the third and second millennia BC in the Near East and Egypt, silver was effectively used as the fundamental reference for measuring value. Furthermore, silver was understood to be money, with the Egyptian treasury being named the "House of Silver" (*pr-ḥḏ*). Curiously, despite the name, for the first few centuries in Egypt, the treasury did not seem to have much silver, but nevertheless did take responsibility for financing or offering material support (Desplancques 2006).[10]

In this sense, Powell (1999) claims that silver was effectively money from the third millennium BC in Mesopotamia would appear to be reasonable. In terms of the argument that "values" and "prices" emerged in tandem in the Bronze Age, it is essential to understand that in the Ancient Near East and Egypt of the third millennium (and later in the Mediterranean and in China) value was understood to be expressed in terms of the prices of the goods being measured or exchanged in some conceptual accounting units serving as money, which were ultimately linked to the equivalent of some weight in silver (which was another form of money).

This system depended upon precision scales and defined weights as the Mesopotamian *sheqel* was a mere 8.33 g or so of silver. The earliest certain weights date to roughly this era, and what is possibly the world's oldest beam balance may likewise date to the same era (Petrie 1920: 29, pl. XLVI, 36). Most archaeologists are familiar with the system of cubical weights developed in the mid-third millennium in the Indus Valley; associated with these finds are, unsurprisingly, a couple of small beam balances and bronze pans that confirm the existence of precision scales (Kenoyer 2010). The basis of the Indus system was apparently a unit around 13.7 g that became known as the "Dilmun *sheqel*" (Roaf 1982; Zaccagnini 1986). The Mesopotamians apparently learned of the system through the trading city in the Persian Gulf (Dilmun), and thence it moved far enough afield so that the term is known from the texts at Ebla. A unit of 13.5 g was also used in Egypt where it was known as the "gold *deben*."[11]

The entire basis of such estimates and measurements depends upon the capacity to weigh with precision. It is also hinges on the concept of equivalencies in which a known is measured against an unknown and a value assigned to the unknown. This process entails weighing, for example, stone weights (of a known weight) against, for example, a piece of lapis lazuli to establish the weight of the lapis lazuli, and then estimating the price of the lapis lazuli as, for instance, the equivalent of twice its weight in silver and then measuring that silver against the same stone weights.

For modern people, the preceding procedure is a relatively simple concept; we are accustomed to relating the value of one thing to another by means of a third reference, usually money in some form or another. The records from Deir el-Medineh in Upper Egypt demonstrate that, at the end of the second millennium BC (Janssen 1975), the workers there always made an estimate of the value of an object in weights of copper or silver and used this as the basis of their calculations of exchange value. When estimating exchange values, they did not work with speculative concepts of utility value that could relate, for example, sandals and baskets; instead, it was the metals copper and silver that formed the background of the origins of their concepts of value. Today, this assessment of worth has shifted to fiat money (and in the Græco-Roman world, it was based on silver coins with a nominal value – and in this sense, between the silver weight of the Ancient Near East and our contemporary paper fiat money). Utility, or the good, does not offer a basis for calculation. It is the measure that offers a means of comparison.

Weights and Justice

As discussed at length in the preceding text, what transformed economics was the third millennium development of equivalencies based on weights of silver by which prices could be assigned to all commodities – and these values were also applied both to human slaves and human labor. The development of monetary values in exchange transactions was founded on stone weights, a bronze balance, and concepts of value dependent upon equilibrium and ratios.

An image of a hand balance on an Akkadian seal (Eisen 1940: pl. VI, 42) demonstrates that by the Akkadian era precision scales were in use (i.e., in the middle of the second half of the third millennium) – and at that time associated with the very gods who were associated with the treasures in their temples. Iconographically, in terms of the history of the system of weighing this artistic representation merely confirms what is known from the archaeological materials of the Indus and the texts of Mesopotamia.

What is significant is that the specific balance on the Akkadian seal is depicted as being used in front of the Mesopotamian sun-god Shamash.

Curiously, around two or three centuries later (after ca. 2000 BC), a passage in the Egyptian *Coffin Texts* (de Buck 1954: 321) refers to "that balance of [the sun-god] Re with which he weighs (*fȝj*) justice (*mȝ^{c}.t*)." Thus exchanges can also be perceived, not only in the techniques of weighing and the conceptual concepts of evaluating, but also in the shared concept associating the balance scales with a cosmic moral judgment.

It is thus highly probable that the concept of measuring weight precisely emerged in the first few centuries of the third millennium BC. The actual instrument and the concept were one part, but of great import is that – based on the archaeological and linguistic evidence – the concepts spread quickly once established. Above all, it was during this era (when the gods were awarded heaps of preciosities) that the concept of justice gradually came to be associated with the system of scales and weights.

It was only a few centuries later (after ca. 1500 BC) that the Egyptian *Book of the Dead* had vignettes that represented the heart of the deceased being weighed against the concept of justice in the form of the goddess Maat in a court presided over by Osiris. From here, the concept moved around the world, such that the judgment of the dead and concept of balance scales and justice are intimately linked in the conceptions of the West today. Beyond that, of course, is the concept of equilibrium that can be found from physics to Taoist philosophy. In addition, there is also the concept of the "just price" that somehow links the estimated value of a commodity (or labor) to an estimated value in money and the concept of "justice."

That the scales of justice make their iconographic and literary debut in precisely this era cannot be mere accident. Yet the new rulers would not have behaved in a fashion that differed substantially from their predecessors. On the contrary, they would have called upon the same symbolism. However, knowing the fates of their predecessors, they were far less secure in their power and consciously looked to the interests of man as well as god.

In summary, there was no need for economic exchange in the Neolithic and is no evidence of real equivalencies in the earliest tablets. By contrast, the early third millennium evaluations in wool understood as "rations" or "remuneration" may (1) have pushed the development and use of balance scales (and the use of weights and measures), (2) the concept of remuneration for labor (with different rates of pay for different qualities of work), and (3) the concept of equivalencies for wool (for use in external trade as well as by literally creating a local internal market in southern Mesopotamia for "excess" wool rations). In this sense, wool rations or compensation for work would be at the origin of equivalencies. Over time, it will have forced the development of precision scales and pushed the expansion of the concept of equivalencies, rapidly leading into the equivalencies of volumes of grain with weights of silver and dependent on the use of uniform stone weights.

Thus, the concept that significant trading began with goods can be discarded and, instead, replaced with the idea that exchange started with compensation for labor. It was not the labor that produced the value, but rather the bureaucratic system of rewards that created the necessity of market exchange, generating the concept of "prices."

The Genesis of Money

This system would then also answer another question: that of the genesis of "money." Money would then owe its origins to state payments, which, as von Glahn (1996) has suggested, may be numbered among the functions of money. In this case, wool was acquired as requisitions and issued as compensation or remuneration. The payments created a situation in which individuals, or their institutional employers, had "surplus" goods that they did not require, but had to dispose of on the market to profit from the situation. Obviously, anyone receiving several times more than what was required in the way of wool, year in and year out for years, would have wanted to dispose of it usefully. Trading with neighbors would only have made sense if they did not likewise receive such items in the compensation system and nevertheless had something of interest to trade. One can easily imagine merchants realizing that a penny could be made by simplifying the operations for the overcompensated bureaucrats. The concept of exporting textiles for profit may have originally grown out of this concept of rewarding bureaucrats. This development would in turn explain how the Akkadian *tamkārum* appeared in Sumerian *dam.gar* because the commercial system will have been part of a different world in the administrative Early Dynastic II era.

One can pose the question of whether this "functional" definition of the origin of money might also be related to an "etymological" definition of the origin of "money": that is, are Akkadian *manû*, Sumerian *ma.na*, Egyptian *mn.w/mn.t*, and Greek μνᾶ/*mina* the origins of the words *moneta*, *monnaie*, and *money*? The *Oxford Latin Dictionary* gives the primary meanings of Latin *moneta* (q.v.) as being related to coinage and money, and the die with which coins are struck. The same dictionary also gives the etymology of *moneta* as "[? Etr]." Significantly, however, among other items, under μονάς (q.v.), Liddel-Scott-Jones states that in Greek, "εἰς μονάδας ἀγαγεῖν" means "reduce to *units* (of weight, here *drachmae*)." This *monad* might thus offer a link between Greek and Latin rather than having to call on the hypothetical Etruscan, meaning that our "money" is directly related to *manûm*, possibly meaning that the most important role of money is indeed its role as a "unit" (*monad*) of "account" (*manûm*), and that the "means of payment" and "store of value" roles are really secondary, both historically and conceptually, and certainly not paramount, as

many different means of payment are accepted, while the unit of account is not negotiable.[12]

Accepting this idea, one could easily relate the evolution of the Latin term to the Greek, with the basic meaning being a "unit," and thus *monad* that, in turn, can be traced back to the Akkadian *manû*. The principle difference would be that the Greeks and Romans would probably have consciously viewed the value of the *mina* as being a weight in metal, but the origins of the meaning as an "accounting unit" were apparently also preserved in the language. Although the link was probably not consciously preserved in their minds, it is in the lexicon.

Papadopoulos (in Urton and Papadopoulos 2012: 266) points out that the Hebrew *mâneh* is the same word, and this would indicate that the Bronze Age meaning of "grace" through wealth is also preserved into the modern world. Yet, clearly, the religious and moral significance of "value" has taken a very different route – albeit one that was diffused throughout the value system that matched the economic system.

It was obviously this system of weighing metal that was the fundamental transformation in the formation of the concept of values and equivalencies. The development of this practice would then in turn answer the question of how values came into existence: firstly, through the interactions of the equivalencies on the markets that created "prices" and, secondly, through social and political interactions whereby the rulers and the ruled adjusted their social and economic behavior in a fashion that was cemented in literary expressions. This first took place in the context of the temples, with the gods responsible for wealth and the distribution of remuneration. Later, the worldly rulers would call upon the support of the gods – and cite the wealth they had given them. And then, the worldly rulers would call upon righteousness when keeping the strong within bounds. "Values" in the sense of immutable moral or social norms (e.g., defending the weak against the strong) were inadvertently brought into relation with the gods, and thus religion, because the ruling elites needed the gods to be associated with social values to buttress their power here on earth.

This historical development that amounts to the origins of money means that the system of payments, compensation, or rations for workers developed in parallel to the system by which prices for goods were established, and that the two were conceived as representing two different worlds. However, the system of evaluating and compensating or rewarding labor was the precondition for the long-term development of equivalencies. Given the fact that labor was not viewed as being related to the "utility value" or "market value" of the goods, it necessarily took quite a while for the *tâtonnement* to develop whereby prices were established because, in the Near East, it was only the exchange value that was taken into account.

This process started in the first millennium of the Bronze Age (ca. 3200–2000 BC). It cannot be traced back any further, yet the techniques and concepts were rapidly adopted from Egypt to the Indus, probably with each individual region making its own particular contribution in accounting, politics, fiscal policies, technology, and poetry.

In this sense, compensation for labor led to the emergence of both the concept and the means for establishing equivalencies. Markets led to the creation of prices, and prices contributed to the emergence of values. All of this occurred in interaction across the full spectrum of the Early Bronze Age world.

The Early to Middle Bronze Age Transformation

A certain arrogance is visible in the monuments on the Giza plateau and the tombs of the cemetery at Ur. At this time, the literature and architecture betrays little beyond the reverence for the gods that was the inevitable expression of the appreciation that the bureaucrats and kings owed to the gods. However, the final centuries of the third millennium were an era of a flourishing literature related to divine support for kingship, whether looking at the city lamentations of Mesopotamia or the *Pyramid Texts* of Egypt. Yet these assertions had little result and the order of the third millennium, founded on the will of kings, gods, and bureaucrats, fell apart.

Around the end of the third millennium BC, the spectacularly bureaucratic Ur III system collapsed and opened the way for the future in the form of the unspectacular but profitable business of the Old Assyrian merchants. In this context, the prices of commodities were assigned verbal values, as visible in the precious stones mentioned in the poetry from the late third millennium onward, and that transformed the vague concepts of prestige values that had been present from the days of the jadeite axes in Europe and China millennia earlier.

According to the vision of the third millennium bureaucrats, through their exports of textiles, the bureaucrats could practically oblige the distant lands to produce the gold, silver, and lapis lazuli that their kings and gods deserved, and that were beyond the reach of any but the highest members of society. It was not foreseen that merchants would be able to sell lapis lazuli to just anyone, and it was certainly not foreseen that the market would throw their cosmically supported organization into doubt. Yet the change took place.

This system of establishing values based on silver relied on the marchants to assure the circulation of grain, metals, and precious objects. Bureaucrats could find themselves in debt because their underlings failed to perform as expected; peasants could accumulate unpayable debts when harvests failed. In this way, the markets took on a life of their own, with individuals and institutions unwittingy involved in unexpected situations.

Among the consequences were not just trade routes, but also the early second millennium Old Babylonian royal decrees canceling debts Obviously, given the dangers of social unrest, the reaction of the palaces to the markets would have been as *ad hoc* as was the response to the difference between the solar calendar and the year as defined by the scribes: An arbitrary edict would cancel debts just as an arbitrary edict would add an intercalary month. However, in the case of the commodity equivalencies, the market would also have eventually played a decisive role in changing the proportions of the ratios. The palaces could accommodate this variation to some degree, as can be seen in some documents from the same room in the archives of Mari, where Durand had one case specifying that the materials were weighed according "to the weights of the market" and that the palace would guarantee to pay at that rate (Durand 1983: 204–206), and another specifying that the silver was weighed according "to the weights of the king" (Durand 1983: 206–207). Despite recognizing the reality, the palaces would have found this system inconvenient and menacing because it undermined their own authority.

This paradoxical result – of the early administrative procedures leading to merchants mistrustful of the palaces – opened the way to new conceptions. Initially, these ideas drew on the knowns (being concepts of values, rates of compensation, equivalencies, exchange mechanisms, etc.) of the third millennium, but eventually they would be discussed in terms of "values" that were sufficiently different from "prices" that the concept of a "just price" could emerge. The entire concept of equivalencies was created at the start of the Bronze Age, from about 3000 BC. Initially, the entire system had to be established, and at that time, there was no intention of creating equivalencies. By the middle of the third millennium, equivalencies had gradually begun to emerge, with market prices following in subsequent centuries.

A millennium after the invention of writing, the concept of a cosmic judgment related to a balance scale betrays that values are present and embodied in the scales. Beliefs are, therefore, implicitly expressed in terms that can be intimately related to market prices. By that time – from Crete and Egypt to Mesopotamia and Elam – lapis lazuli and gold had established themselves as irrefutable indicators of social prestige, concretely reflecting the "values" of the cosmopolitan elite society based on market prices.

The collapse of the order toward the end of the third millennium led to questions about the system, but, in the Bronze Age, these questions were never very serious. It was only in the west in the first millennium BC that new interpretations began to appear that transformed the understanding of power, knowledge, art, and justice. It was only when the values were verbally and financially specified that one can speak of values that are shared. Such values are the basis of economic transactions and religion. These gradually emerged in the Near Eastern Early Bronze Age.

CONCLUSIONS

Sometime in the fourth millennium BC, a statelike structure emerged in southern Mesopotamia. Many other primitive polities – Syria, Anatolia, and Persia – were then subdued, destroyed, or co-opted by the new structure. At the end of the fourth millennium, they had established trade networks facilitating exchanges in textiles (exported in exchange for other goods they sought to import, such as copper and wood). After the invention of writing, their system of colonies and outposts was no longer essential; because writing allowed the transmission of information, local representatives were not required. Yet when revising a brutal system of tax collecting, the southern powers neglected to take account of the interests of the representatives in distant lands, trade declined, and thus the incipient system collapsed.

But what remained was the capacity to record information and to measure goods. Somehow, someone realized that copper could be mined in Oman and sent by sea to southern Mesopotamia. This put an end to the southern Mesopotamian copper imports from Anatolia (although Syria and Egypt would go on importing Anatolian copper for more than a millennium). What caused this change is not clear. What is clear is that as the Omani copper mining industry took off in the first half of the third millennium BC, weights in silver gradually began to be used to calculate equivalencies. In Mesopotamia, the weights were integrated into a system of measures, and it could be imagined that some cost calculations may have favored the import of copper from Oman rather than Anatolia (as was the case in the second millennium). It may well have been textiles, wool, and grain that were sent south, but the prices were calculated in weights of silver rather than volumes of grain.

Once lapis lazuli was assigned a price in silver, the princes of the Orient had merchants who could acquire the silver in Anatolia (which was presumably mined by dependents of slaves of Anatolian princes who were the beneficiaries of the south Mesopotamian textile exports), and bring that silver to Mesopotamia, so as to pass it across Iran to Central Asia (where local potentates doubtless supervised the mining of lapis lazuli) to acquire the stones.

In this fashion, two different networks were linked together: one drawing on prices for precious materials (such as carnelian and lapis lazuli, gold, and silver) and another on ordinary commodities (such as copper, wood, wool, and textiles). The ensuing geographical network directly linked Egypt and Nubia, the Levant and the Aegean, Syria and Anatolia, the Indus and the Persian Gulf with Mesopotamia and Iran into one single market linked by prices. The precious materials flowed into the courts of Egypt and Mesopotamia where poets and craftsmen began developing elaborate systems of ideological legitimation expressed in poetic and iconographic terms, drawing upon those objects that had high prices.

The authorities in the core civilizations of Egypt and Mesopotamia stipulated the units of measure and proposed values that were then negotiated in the markets. The merchants had to negotiate with both the prices in the core and the producers in the distant periphery. Yet, the princes held the stronger hand, for without their demand, the entire network would collapse. In this sense, until well into the first millennium BC, the institutions of the core were in an excellent position to dictate the demand and negotiate the prices. However, the dependence of the princes on the materials was the foundation of their power, and this spurred the craftsmen and bureaucrats to exploit the yearnings of the princes. In this fashion, fine works of art reflecting social values were produced in those societies where poets mourned the destruction of cities and praised wise kings, beginning a tradition that spread around the world, contributing to our concept of society and civilization today.

The basics of the two systems of values were invented, developed, and implemented by the authorities of the core system. Indeed, their very political authority was based upon what they had created, both in terms of systems of value and in terms of political and economic power. Yet the artificial system was so persuasive that we today assume that values are an inherently human artifact of the brain, but they are in reality merely a cultural system that diffused around the globe in historical times. The nature of the earlier fragile system of values created in the Neolithic was probably too diffuse to survive both logic and the markets. Thus, somehow, in the course of the wanderings, it was the concepts of money and prices that ultimately emerged from the shadow of values such as justice and knowledge.

NOTES

1 I am rarely, if ever, in accord with Renfrew, but the exception proves the rule, and his observations about the variety of understandings of "value" in Papadopoulos and Urton (2012: 249–260) are right on the mark. The issue is in need of clarification not obfuscation, and thus this effort.

2 Englund (1998: 118) does note a system that may have been used for weight measurement, but in contrast to the other inconvenient sexagesimal systems (such as the twelve-double-hour day that is still used), it certainly had no influence on later developments – even if it could possibly be identified as a system of weight measurement.

3 Crucial for the history of money is that the later fictional introduction of the grain into the system of measurement means that grain was not at the origin of money, in contrast to the suggestions by economists. Later, grain was assigned a value in silver and could be used as a form of payment, but it was not the conceptual origin of money. Significantly, it is the "unit of account" role of money that is at the origin of money.

4 As the theme of this chapter should be related to "trade and civilization," I concentrate on the earliest developments in the Near East and henceforth neglect Europe for the most part. (For surveys of economic activity in Prehistoric Europe, cf. e.g., Kerig and Zimmermann 2013; Louboutin and Verjux 2014). However, one can postulate that the alert reader will have noted that, in comparison to the Near East, Europe fell by the wayside of social evolution at roughly the time that copper replaced jade – possibly partially due to the market values as I propose. Regardless, the abandonment of precious stones in Europe took place at

that time when the precious stones became markers of prestige in the Near Eastern states. As the principal difference between Central and Northern Europe and the Near East for the following three to four millennia was the absence and presence of states (respectively), it is significant that, despite access to raw materials and technology and a consciousness of market mechanisms, Europe limped behind the Near East, not only politically but also economically and culturally. This might underscore the fundamental importance of the state for cultural development, and thus suggest that trade alone is inadequate.

5 To take a random example from the Akkadian texts: The price of a group of tools is described as *kaspūšunu* "their silver" (Oppenheim 1971: 56) – and yet in the same sentence of the same text the equivalency is expressed in silver written in Sumerian, *kú.babbar*, indicating the conceptual difference between the "price" and the "payment." The same peculiar phenomenon appears in the Egyptian texts where "my money" is described as "my silver" (Gardiner and Černý 1957: pl. 45, 1 verso 3), but in this case the actual "money" used for the payment was heap of household goods with no silver in sight.

6 It should be clear that this sentence means exactly what it says: There is no precise data for the price of lapis lazuli in Egypt because there is no indication of what value the weight of the lapis lazuli pieces was in silver, which is the source of the prices in the Near East. However, it is clear that in Egypt, lapis lazuli was assigned a price in silver, in contrast to the assertions of B. Menu (for references, cf. Warburton 2008: 219–221, 2016).

7 It is striking that Colburn (2008) documented the arrival of lapis lazuli in Pre-Palatial Crete, but suggested merely that the pre-Minoans who could afford to place it in their tombs must have "had access to distant lands" to acquire it (Colburn 2008: 205). The issue is not the access to distant lands, but the import of a concept of social prestige based on precious materials typical of the contemporary Near East: The actual materials are imports, but more importantly they also end up in elite tombs reflecting a shared philosophy (or at least a shared practice of identifying the same materials with the same elite status). For the rest, her argument is hopelessly naïve, but hopefully, her naïveté did not induce her to thinking that they would have traveled all the way to Afghanistan. Thus, I assume that these early Cretans acquired it from merchants on Crete, but would allow Colburn to have them traveling to the Levant, where they would still have acquired it from merchants. Thus, their knowledge of distant lands would have been relatively limited in comparison to that of the elites in the more civilized world of the Near East (for which cf. the list of Aegean place names in Egypt from the mid-second millennium BC, Edel and Görg 2005). Despite Colburn's protests, the direction of the diffusion in the Pre-Palatial and Early Palatial periods on Crete is clearly from east to west and unmistakable in character.

8 Interestingly enough, however, the less well-off people of Egypt gradually began to crave the cheap imitations of turquoise and lapis that were available in faïence, and thus, they climbed up to the level of the Mycenaean princes in this respect. The kings of Egypt seem to have indulged their people to the extent of not only supporting the manufacture of faïence trinkets, but also adopting the custom of using the cheap imitations on occasion, as demonstrated by the fact that items of faïence have turned up in royal tombs.

9 Even if the value of their work did not stay with the object, the craftsmen may well have been rewarded handsomely. The value of labor was understood and was measured along a scale whereby those at the bottom performing essential but undemanding tasks (e.g., grinding grain and harvesting fields) were basically assumed to merit little more than a subsistence existence (on the condition that they worked), while the creative members of society (e.g., bureaucrats/poets and craftsmen) were viewed as justly deserving vastly more (simply by virtue of their positions). The fact that the decisions about the allocations were made by the bureaucrats/poets (who commissioned the craftsmen) would doubtless have influenced their decision making. In fact, the bureaucrats/poets probably did not really view the lowest members of society as being humans like themselves, but rather as being closer to cattle. Obviously, this interpretation of society is extremely relevant to the interpretation of both social justice and economic growth. If the bureaucrats basically dismissed the greater

part of human society – i.e., subsuming their social well-being in the same, anachronistic, category as "animal rights" – and assumed that any economic growth was due to their own efforts and for their own benefit, it follows that it is equally anachronistic to search for evidence of economic growth across society.

10 In fact, there is no doubt about the role of the *pr-ḥḏ* in Egypt, as being a repository of some kind. Yet there has been some discussion of the name, so that there is a debate among Egyptologists about the meaning of the term because it can mean either "House of Silver" or "White House"; yet this discussion neglects the fact that it could also mean "Bright House" and not just "White House." In addition, this variation raises a very strange question. In general, it is assumed that in Mesopotamia the treasury was a kind of storehouse: ganun or *ganūnu/ganūmāḫu* (*Reallexikon der Assyriologie,* s.v., Speicher, Oppenheim 1956, s.v. *ganūnu*). However, the temple of Shamash at Sippar (the *é.babbar*) seems to have served as a bank, and bore a name that would have the same general meaning as the Egyptian term for treasury (in the sense of "White House," "Bright House," "House of Brightness"). But perhaps even exactly the same range of variations as the Egyptian because, aside from those mentioned, *é.babbar* can also be understood in the sense of "House of Silver": While the Sumerian for silver was *kú.babbar*, this could be reduced to *babbar*. Therefore, the meaning of the name is not clear, but the role of the institution is. Thus, the question should probably be whether the Egyptians had a "treasury" that functioned as a "central bank" rather than whether the word meant "House of Silver" or "White House."

11 For references, check the sources listed in the articles on weights and measures in the *Encyclopedia of Ancient History* (Bagnall et al., 2013: 7081–7094).

12 In terms of the history of economics and economic thought, it is probably most important that this etymological reality corresponds to Keynes's stress (Keynes 1998, *Treatise* in JMK Collected Works V/I: 4) on the importance of the unit of account as the most important form of money – a point lost on modern economic thinkers.

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FOUR

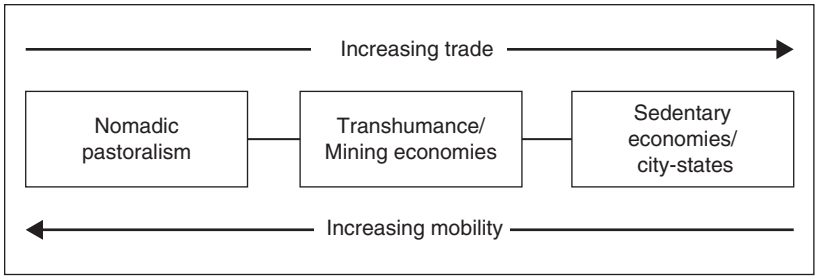
THE RISE OF BRONZE AGE PERIPHERIES AND THE EXPANSION OF INTERNATIONAL TRADE 1950–1100 BC

Kristian Kristiansen

INTRODUCTION

While early Bronze Age centers of civilization, Mesopotamia and Egypt, were highly productive and therefore could sustain urban populations, they lacked metals needed in the economy for tools, weapons, and ornaments, just as they lacked precious metals and highly valued products such as lapis lazuli, gold, silver, and amber. Tin needed for bronze is extremely rare and had to be traded in from distant sources as well. All of this meant that more peripheral regions with access to such materials had to be enrolled into the commercial networks of these early Bronze Age states. The implications of this center–periphery structure have not been dealt with in a systematic way until more recently (Beaujard 2012; Kristiansen and Larsson 2005), and it is therefore the theme of this contribution. I shall begin by formulating the basic questions.

What role did the more distant and peripheral regions of the Bronze Age world economy play for the reproduction of that system, and did these peripheries and margins change their outlook and become more "civilized" in the process? Did they only provide raw materials? How do we explain that they sometimes turned against these very same centers of civilization? To understand this demands that the relationship between the rise of peripheries and their relationship to the dynamics of the centers of civilization be analyzed, as we are dealing with a regional, globalized, division of labor for the first time in world history. This investigation, however, also demands an analysis of



4.1. Basic political economies in the center–periphery relations of the Bronze Age world system.

the civilizing effect on Bronze Age peripheries in terms of their adaptation of select traits/technologies and values/lifestyles from the centers. We must also understand that among the products being exchanged from peripheries to centers were animals (including horses in high demand for chariots) and humans (mercenaries and slaves). From centers to peripheries, not only prestige goods were traded, but also traders and craft specialists found their way into these more barbarian societies and served as middlemen, just as returning mercenaries would bring new technologies of warfare with them upon their return.

Therefore, I propose that peripheries were important to the operation of the Bronze Age world system, and further that their "rise and decline" conformed to large-scale changes in international trade and political economies. This was due to the fact that copper and tin were needed by every community, and therefore demanded the maintenance of stable supplies. But, as productive copper mines and tin mines were few and not found in the centers of civilization in Mesopotamia and Egypt, these very same centers were on a constant search for new mining areas, to keep up supplies. The international dependency on bronze (copper and tin) during the period 3000 BC to 1000 BC of the Bronze Age would thus have its closest parallel in the present world system's dependence on oil.

In the following, I shall trace the expanding northern and western frontier of the Bronze Age world economy during the period 1950 to 1100 BC, illustrated by four case studies. They represent the gradual westward expansion of a Bronze Age world system, ending in a final decline or setback after 1200 BC when the European peripheries hit back at the centers in Anatolia and the eastern Mediterranean. During the same period, a similar eastward expansion of Bronze Age societies took place to include China and India, which however is beyond the scope of this article (Kohl 2007; Kristiansen 2011). It implies that from around 1500 BC a global Bronze Age economy, and world system, comprised all of Eurasia from China to Europe with bronze as its economic motor.

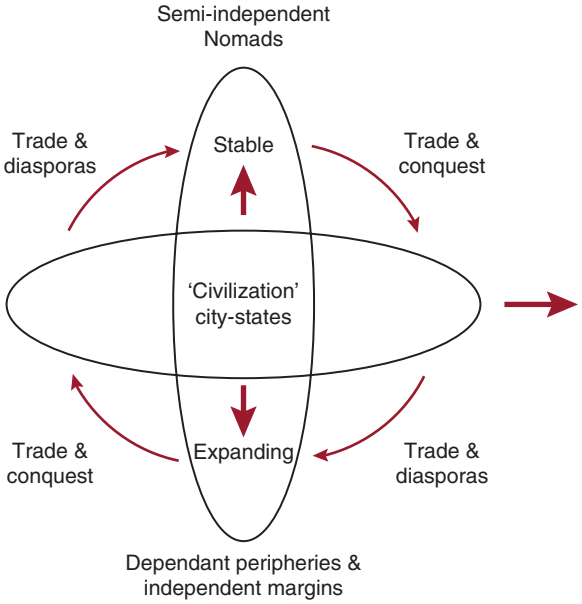
In Figure 4.1, I have summarized the dynamics between center and periphery in the context of western Eurasia, where pastoral, warring nomads

played a major role, which has not yet been properly understood (Kradin 2002, 2015; Kristiansen and Larsson 2005). They brought new inventions such as the two-wheeled chariot to the Bronze Age city-states in a series of conquests during the eighteenth century BC that, among other things, established them as Indo-Iranian–speaking overlords in the Mitanni kingdom east of the Hittites in eastern Anatolia, and further east in present-day Iran and northern India/Pakistan (Kuzmina 2007). The Mitanni kingdom was at its height between 1500 and 1300 BC, but textual evidence suggests the new overlords were present from 1750 BC, before the Hittites rose to power. They were famed charioteers and developed sophisticated training programs for chariot horses, such as that of Kikkuli, a master horse trainer of the land of Mitanni, preserved in the archives of Hattusa (Raulwing 2000; Raulwing and Meyer 2004). Before that time, the northern pastoral chiefdoms also provided horses and warriors just as they controlled the rich mining areas in the Caucasus (see following text). They also provided protection to the caravans of the later Silk Road whose origin could well to be in the Bronze Age where it provided tin and lapis lazuli to the Mesopotamian heartland before silk (see Wilkinson chapter this volume).

In Figure 4.1, it is stipulated that closer peripheries would gradually enter the civilized core regions, such as the Minoans and later Mycenaeans. It is also stipulated that pastoral nomads were more inclined to promote trade with the Bronze Age city-states, as they craved for and needed some of their produce, but otherwise remained independent. Their relationship with urban civilizations was opportunistic, and they remained a latent threat due to their military force and mobility.

In Figure 4.2, I have summarized the components of Figure 4.1 into a more dynamic model, which suggests that trade and conquest were two sides of the same coin, and altered according to what looked most profitable at the time from the semi-independent peripheries and the centers, respectively. Both could employ the strategies of trade altering with conquest followed by diasporas of traders, craftspeople, and settlers, as known from later historical periods, for example Vikings (Kristiansen 2017). The history of the Near East and Anatolia has demonstrated this to be true time and again since the Bronze Age. It is only from the Bronze Age onward that a more developed regional division of labor is established that granted the semiperiphery of warring nomads an important historical role in the new Bronze Age world system. Later, temperate Europe would be added as new peripheries.

Therefore, the period from ca. 2000/1950 BC to 1100 BC does not represent an evolutionary sequence, but a geographical expansion of a Bronze Age world economy when Hittite, Minoan, and Mycenaean civilizations became part of core Bronze Age civilizations, which in turn created new peripheries in Europe/western Eurasia (Beaujard 2011). The Bronze Age may thus be said to



4.2. Dynamic model of the interaction between expanding centers and different peripheries in the Bronze Age world system.

represent the first historical epoch in the evolution of world systems. Such historical epochs are characterized by a number of shared conditions – whether economic, technological, or social – that integrated political economies and allowed them to interact (Earle et al. 2015). The level and degree of interaction determined the scale of the epochal structure. It implies that societies were linked together by a common historical destiny at the level of macrohistory. The limits or constraints of such epochal foundations define the conditions for their transformation and downfall. Another shared condition among Bronze Age societies was the universal development of new technologies for transport on land and at sea, which enabled the expansion of international trade (see Kristiansen this volume: Chapter 1).

FOREIGN TRADERS AND EXCHANGE VALUES

By the time Europe was entering into a closer commercial collaboration with city-states of the east Mediterranean and Anatolia, a highly developed commercial trade based on profit calculations and markets already existed (see Barjamovic and Monroe chapters, this volume). Access to trade routes and new markets were among other things conditioned by, and regulated by, political treaties and the competitive advances that followed in the form of monopolies on certain products. It seems clear, however, that during the first quarter of the second millennium BC Europe was only marginally important, as most trade networks were going east rather than west. The Baltic zone started to

provide amber in some quantities, and tin was now systematically mined and bronze alloys started to dominate. However, to establish regular trade with the more barbarian European societies, they needed to adopt new institutions of political leadership that allowed trade and traders to travel and trade safely. In addition, we also need to consider profit calculations to understand how these changes were brought about.

The identity of traders in the Near Eastern Bronze Age is often linked to wealthy families of foreign origin that were invited to settle and bring in the goods local elites craved for. The classic example is of course the Old Assyrian Karum trade (Larsen 2015), but also later we find the skills of trade being in the hands of ethnic "foreign" groups that through their long-distance family networks were providers of goods otherwise not attainable to local elites. However, once the traders were in place, they would often receive or develop trading monopolies in more basic resources, due to their commercial skills. Thus, the Old Assyrian traders were in charge of the local copper trade throughout most of Asia Minor (Barjamovic 2011), as well as trade in wool (Lassen 2010). Such family trading houses could also operate as part of a "colonizing" policy to form trading emporia, exemplified by the Phoenicians (see Monroe chapter, this volume), or they could be granted trading privileges as part of treaties between city-states, such as the Old Assyrian Karum trade (Barjamovic chapter, this volume). Or they were migrating specialists who brought and sold their skills as individual agents, whether mercenaries, traders, or craft specialists (Zaccagnini 1987). Thus, there seems to exist a historical regularity originating in the Bronze Age, perhaps earlier, that traders were defined as ethnic "foreigners" thereby granting them a neutral status that gave them certain privileges, as well as constraining their activities in other ways. This is best documented in the Near East (Monroe 2009: ch. 6). In the following, I shall make an attempt to identify the political institutions of trade and the places, if not markets, where traders would meet.

Profits had to be substantial to pay off for the risks of trading with the peripheries of Europe: Cornwall in England for tin; south Scandinavia/the Baltic for amber, gold, and silver; salt from the Carpathians; and horses from Caucasus and the steppe. It is therefore important to establish some rates of exchange, and there is textual evidence from the Late Bronze Age. According to Morkot (2007):

> Gold, silver, copper was in the New Kingdom calculated as 1:2:200
> In Ugarit around 1200 BC as 1:2:400

If, as a conservative estimate, gold is replaced with amber, as in Roman times, we can calculate its value in the Mediterranean: 2 kg amber = 400 kg copper. On the West Coast of Jutland, a trained amber collector can, in the eight to

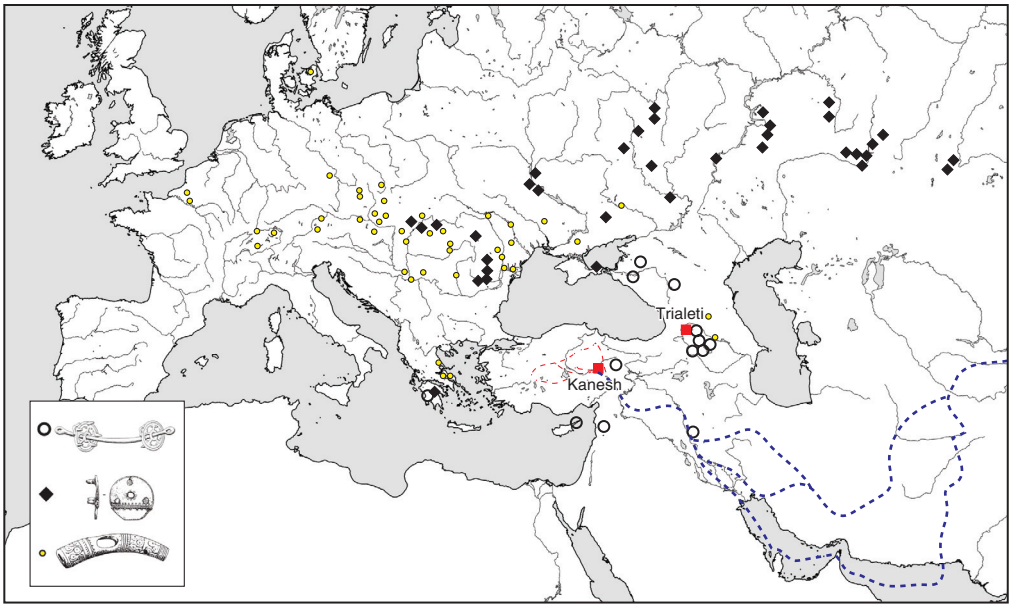
ten days following a heavy storm, collect up to 2 kg of amber searching a well-known kilometer of beach. In the Bronze Age, a single household could during the stormy season collect 10 to 15 kilo of amber, which corresponds to the size of a large amber pot, partly filled, that was recovered in a Late Bronze Age house in Thy (Bech in press; Earle in press). Substantial quantities of amber – hundreds of kilos – could therefore have been exported south every year. This explains the incredible wealth after 1500 BC in bronze and gold in south Scandinavia, even if we have to subtract profits for the many middlemen on the way. We may also assume that amber, like gold in the preceding example, increased its value during the Late Bronze Age due to increasing demand.

However, other rare products in demand were of course tin and gold, as well as chariots builders and horsemanship. The famous Kikkuli letters from the Hittite archives tell of an Indo-European horse trainer, who wrote down a manual for training war horses for chariots (Raulwing and Meyer 2004). In this case, steppe societies and the Caucasus were able to provide such skills as well as horses for the expanding city-states in the Near East, and this is perhaps part of the explanation for the rise of the rich Trialeti culture in the Caucasus after 2000 BC, in tandem with the control of important silver mines.

1950–1750 BC: FIRST COMMERCIAL CONTACTS AND THE RISE OF WEALTHY PERIPHERIES IN THE CAUCASUS AND BEYOND

Trialeti and Trade in Metal and Horses

The steppe tradition of tumulus construction reached southern Caucasus by the middle of the third millennium BC, where we find several monumental chiefly barrows covering huge timber chambers with wagons (Makharadze 2014). However, from the beginning of the Old Assyrian trade with Anatolian city-states (see Barjamovic chapter, this volume), we can document the concomitant rise of new "barbarian" elites in the mineral-rich region of the southern Caucasus, present-day Georgia, and Armenia (Figure 4.3) that had links both to steppe chariot-driving nomads and to the civilizations in Iran and Anatolia. Their culture named Trialeti is characterized first and foremost by monumental tumulus chamber burials with costly imports (Narimanishvili and Shanshashvili 2010: Abb. 7–8, Abb. 15–15). In addition, their fortified settlements are now beginning to appear (Narimanishvili and Shanshashvili 2010: Abb. 20–34; Shanshashvili and Narimanishvili 2012). It is perhaps not too far-fetched to suggest that their riches were in part based on the control of copper, and especially silver and gold sources that they could export to the south, perhaps in return for fine textiles from Assur, or perhaps Kanesh. The Old Assyrian traders were also in charge of the copper trade in Anatolia, and they traded it in from the Pontic region in the north, which could well have



4.3. Interregional trade and chariot conquest networks, marked by horse cheek pieces, connecting Bronze Age steppe societies, mineral-rich Caucasian societies and the Old Assyrian trade network during the period 1950–1750 BC.

had links to the southern Caucasus. From here, well-bred steppe horses could also be imported. Karen Rubinson has, in a detailed study of the iconography on two famous silver goblets and a bucket from Trialeti royal burials, identified singular traits in dress and style that conclusively point toward Kanesh (Rubinson 2003, 2006). The bucket was probably an import from Kanesh, while the goblets could have been locally made, but under Anatolian inspiration.

Trialeti burial inventories, however, also display traits that link them to the steppe, and the elite environment of horses and chariots (Figure 4.3). We can identify a royal elite style on horse gear shared between the steppe, Caucasus, and the early Hittite city-states, as well as the early Mycenaean shaft graves (Kristiansen and Larsson 2005: fig. 78). Its spiral and wavy bands are also found on Trialeti pottery (Abramishvili 2010: fig. 4.2)

Thus, the Trialeti culture became a hub of exchange between the steppe and Hittite Bronze Age city-states on the rise in Anatolia. The Trialeti kingdom prospered by controlling the mining areas of southern Caucasus, especially the important silver mines whose produce could be exported to central Anatolian city-states, such as Kanesh, which needed silver to pay the Old Assyrians merchants for their costly trade goods. In exchange, the Trialeti chiefs received prestige goods, such as silver buckets and goblets, and long bronze rapiers. However, they were also connected to the expanding steppe societies that brought with them the newly invented two-wheeled chariot, as

well as horsemanship and horses, as exemplified in Figure 4.3. Such horses were very costly and could be exported south as well as horsemanship, reflected in the Kikkuli text (Raulwing and Meyer 2004). Later during the sixteenth to fourteenth centuries the Trialeti people buried their elite warriors in chariots, and had close relations with the Mittani Empire, as reflected in imported cylinder seals, glass beads, and Near Eastern–type daggers (Narimanishvili 2012; Puturidze 2003). One may suppose that the Mitanni overlords had their origin in some of the chariot-driving elites of the southern Caucasus, including Trialeti. However, for now (1950–1750 BC), these chariot-driving warrior elites were confined to the steppe and Caucasus, where they ruled, traded, and thus adopted selective traits of Bronze Age lifestyle. Their long rapiers are similar to those later found in the shaft graves in Mycenae, which received them from the Minoans, the new rising sea trading power in the east Mediterranean during this period. They would most likely have been imports from Anatolia.

However, the Old Assyrian trade system in Anatolia and beyond apparently declined when Hittite city-states gradually formed larger territorial states that would later become unified with Hattusa as their capital (Barjamovic, Hertel, and Larsen 2012: chs. 2–3). In the process, the Trialeti kingdom turned its interests toward the south. The Mitanni kingdom was formed in the aftermath of these turbulent events, which also saw the invasion of the Kassites further south. It corresponded in time to a series of interrelated historical changes in the Near East during the eighteenth to seventeenth century BC. They were linked among other things to the spread and adaptation of the "chariot package," which demanded both skilled specialists and the importation and training of horses from the steppe. It coincides with disruptions and social changes, including conquest migrations over large areas: the Kassites in Mesopotamia, the Aryans in India, the Hyksos in Egypt, and a new chiefly dynasty in Mycenea (the B circle), just as Indo-European-speaking people are emerging in Mittani texts and other sources from the Levant and Palestine. In all cases, these were rather small groups linked to the ruling elite, being warriors and specialists, sometimes rulers. According to Drew: "The new rulers are in most cases a dominant minority, constituting only a tiny fragment of the population. This was especially true of the Aryan rulers in Mitanni and the Aryan and Hurrian princes in the Levant; it seems also true of the Kassites in Babylon and the Hyksos in Egypt. The Aryan speakers who took over Northwest India may have gone there en masse but were nonetheless a minority in their newly acquired domain" (Drews 1988: 63).

Trialeti is thus is one of the earliest examples of the interaction between pastoral nomads in control of trade and warriors, and Bronze Age civilizations, whom they influenced heavily by introducing chariot warfare, and by becoming conquest overlords in the later formation of new kingdoms, such as Mitanni.

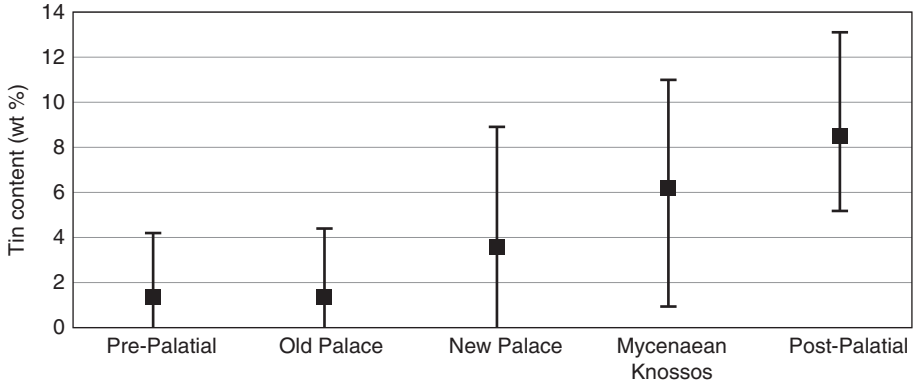
1750–1500 BC: GOING WEST

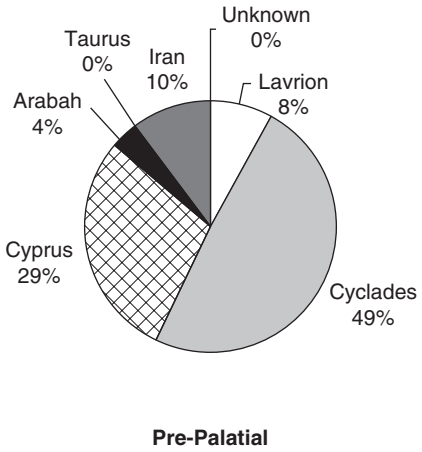
Minoans and Mycenaeans Trading Tin from Wessex, Salt and Silver from the Carpathians, and Amber from South Scandinavia

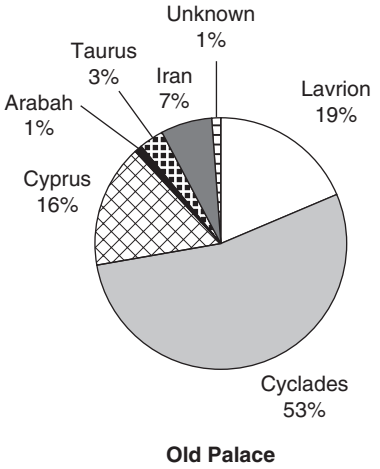
Around 1750 BC, Mesopotamia, at its height toward the end of Hammurabi's reign, stopped importing copper from Oman, and turned toward the west, especially toward Cyprus (Millard 1973), whose rich copper mines now began producing for a bigger market. Shortly thereafter, the Dilmun trading kingdom collapsed and with it the eastern trading network in the Persian Gulf and beyond (Højlund 2013). At the same time, tin sources from the east apparently dried up, and a search for tin took traders on explorations in the western Mediterranean where they finally located tin in Cornwall and stimulated the rise of the rich Wessex culture in its late phase.

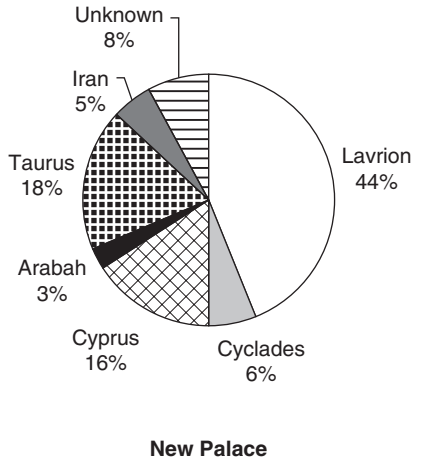
The rise of the Mycenaean to power conforms to classic center–periphery dynamics, where the periphery starts out as provider of essential raw materials in exchange for prestige goods, craft specialists, and perhaps dynastic alliances (Nafplioti 2009), and that, over time, empowered the former periphery to become the new center. We can observe that the early Mycenaean culture started to supply copper from Lavrion to the Minoans from the New Palace period (Figure 4.4, based on Gale and Stos-Gale 2007) in exchange for prestige goods, found in the rich shaft graves, and we can also observe a raised content of tin, probably now from Cornwall, just as silver was traded in from Carpathian mines (Stos-Gale 2014). In addition, silver was abundantly needed as the commercial standard in all trade transactions in the Near East and east Mediterranean. When the Mycenaean finally took control of Knossos and Crete around 1500 BC, the tin content raised further, suggesting they were in charge of the west Mediterranean trade for tin, amber, and other high-value products by now (Figure 4.4). What was the background for this change of power between Minoans and Mycenaean? One factor was undoubtedly a weakening of the Minoan sea trade empire after 1623 BC.

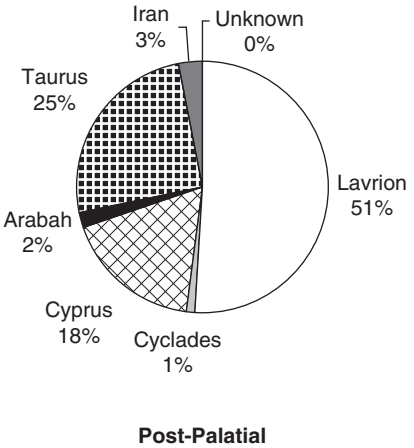
During the beginning of the New Palace period, Minoan economic and commercial power was at its height, with an expanding presence in many parts of the east Mediterranean as evidenced in Minoan pottery, often including kitchen ware, weaving tools, and linear A script (Vitale and Vitale 2013: fig. 4.1, although I disagree with their minimalist interpretation). However, in 1623 BC, the Thera eruption destroyed the flourishing Minoan/Cycladic trade network (Papadimitriou and Kriga 2013: figs. 2.2 and 2.3). At the same time, the Hittites expanded military, sacked Babylon, and Ebla as well as other Syrian towns were burned down. All of these calamities meant that many existing trade networks collapsed, at least temporarily, and the metal trade suffered. This gave the rising Mycenaean power its big chance, which it took. Therefore, new











4.4. Tin content in Cretan bronzes, and lead isotope analysis of the origin of Cretan copper (based on Gale and Stos-Gale 2007).

interest in expanding the western and northern trade networks was organized from Mycenaean palaces. Trade emporia in Sicily, such as Thapsos, are used as a bridgehead and Sardinia also gains in importance (Cazella and Recchia 2013: fig. 6.4). The Wessex route, now through Switzerland and the Rhine, continues for another century.

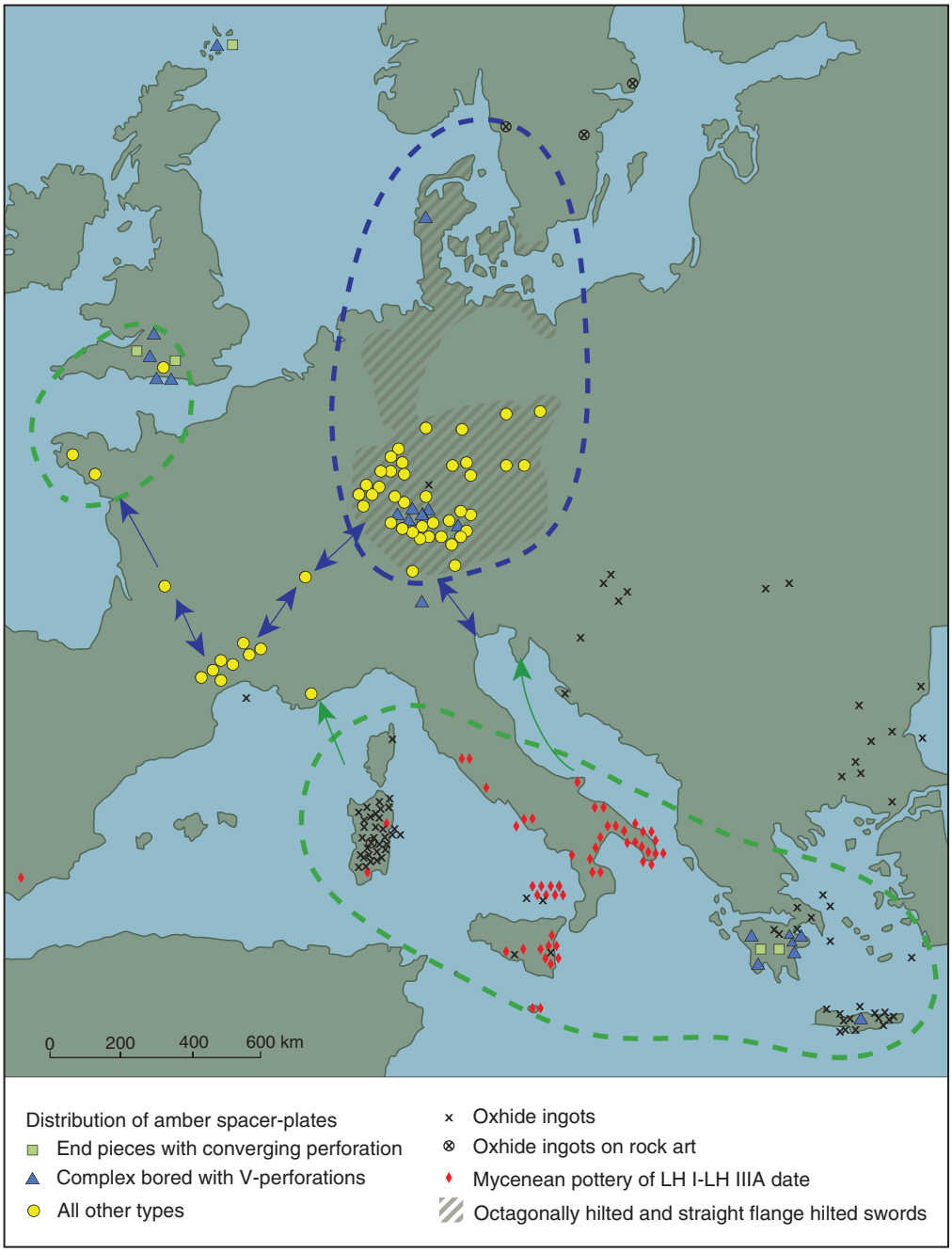
However, a profitable trading route had also been established with the Carpathian region, rich in gold, salt, and silver – and horses that were now exported south, along with horse harnesses and perhaps horse trainers (Harding 2005; Maran and van de Moortel 2014; Payne 1990). In the Carpathians, we find a group of Mycenaean rapiers, encircling the area of rich salt mines and gold (Dietrich 2010). These enculturated "Mycenaean" warriors also brought along their helmets made of boar tusks, and it can now be demonstrated that silver was exported from Carpathian mines (Stos-Gale 2014). From the flourishing Carpathian tell cultures, a new direct trade route was opened with Denmark and south Scandinavia, which would channel Baltic amber back in return for copper and gold (Swieder 2013), as well as swords, horse cheek pieces, and the institution of warrior elites (Vandkilde 2014). This trade route would flourish until 1500 BC, when the Tell cultures in Hungary collapsed, and some of their inhabitants would migrate to the Po delta, where they became part of a new expanding Terramare culture, organized much in the same way as the Tell settlements.

All of this meant that the Carpathian trade route declined, and instead the Mediterranean maritime trade network hooked up with the south German Tumulus culture and Denmark, through southeastern France and the Terramare culture in northern Italy (Fischl et al. 2013: figure 8). Parallel with this shift, copper from the western Mediterranean was now distributed along the same trade circuits to Denmark and south Scandinavia (Ling et al. 2014). A new commercial network had been established (Figure 4.5).

1500–1200 BC: GOING NORTH

The Integration of South Scandinavia into the Mediterranean Trade System

After 1500 BC, we see the opening of a new trade network that connected Denmark directly to south Central Europe and the Mycenaean trade in amber (Figure 4.5). This trade was supported by central meeting places ("markets"), such as the Terramare culture in the Po Valley, where we find Mycenaean presence from this period (Late Helladic III B onward: Iacono 2012: fig. 5.2), and in south Germany the large fortified settlement at Bernstorf (Bähr, Krause, and Gebhard 2012). They reflect the opening of a direct trade link to south Scandinavia to get amber directly from the source rather than through Wessex or the Carpathian Tell cultures, which had previously been the case. This



4.5. During the fifteenth and fourteenth centuries BC, a maritime Mediterranean trade network was linked to a land-based trade network that connected South Scandinavia with south Central Europe and the Mediterranean.

commercial shortcut directly to the source marks the start of a most remarkable flourishing of a Nordic Bronze Age culture, which suddenly became incredibly rich in copper, tin, and even gold. During the following centuries, south Scandinavia produced and deposited more elaborate bronzes in graves and hoards than any other region in Europe. Baltic amber likewise ended up in rich graves in south Central Europe, Italy, and in Mycenaean graves (Czebreszuk 2011, 2013), as well as in the Levant (Mukherjee et al. 2008). If we consider the rate of exchange between amber, gold, and copper, the economic gain for south Scandinavia by taking charge of this trade becomes easier to understand. Mesopotamian glass, and to a lesser extent Egyptian glass, likewise found its way to Denmark along this trade network (Varberg, Gratuze, and Kaul 2015) that also included new body culture, such as razors (Kaul 2013), as well as woolen textiles to make clothes (Gröner 2014).

The quantities of copper, tin, and gold exported back to Denmark is staggering, and created the basis for the formation of a rich material culture emulating Mycenaean prototypes. There was a virtual explosion of depositions of bronze and gold objects in graves; during the period 1500–1150 BC around 50,000 barrows were constructed for the local elites (free farmers/warriors), and an estimated 20,000 swords were deposited (Holst et al. 2013). From excavations of farmsteads close to the North Sea in northwestern Jutland from this period, we have documented a cache of raw amber hidden under the floor. Amber is relatively rare in graves in Denmark, it was too costly, whereas complex amber ornaments are frequent in graves in south Germany and are similar to some of those found in Mycenaean graves. All amber in the Mycenaean culture and in the Near East is of Baltic origin, and its frequency in graves increased during this period and, with that, also demand and prices.

Recent analyses of lead isotopes on Swedish and Danish bronzes from this period (Ling et al. 2014) has demonstrated that the origin of copper is for the most part from Sardinia and the Iberian Peninsula, that is the west Mediterranean trade network. Thus, Mycenaean traders and their partners must have had some control over Sardinian/Iberian copper mining, which they, in all probability, transported north through south France and further on to Bernstorf in south Germany, and from there north to south Scandinavia.

There are numerous examples of both direct imports and indirect imitations of Minoan/Mycenaean objects and style in the Nordic realm during the period 1450–1300 BC, such as campstools and specific forms of spiral decoration that emulated Mycenaean prototypes (Kristiansen and Larsson 2005).

Baltic/Danish amber was the highly valued, mythical material behind these enterprises, which started during the Shaft Grave period (Maran 2004), but became more regular and systematic with the opening of the direct trade link to Denmark through south Germany, when amber is a regular feature in Mycenaean graves (Czebreszuk 2011, 2013). Warriors and traders, including

women (Frei et al. 2015), moved on a regular basis between south Scandinavia and south Germany – probably even further. The Terramare settlement of northern Italy provided one such bridgehead. In this area, there are amber beads as well as other evidence of northern connections in the form of sword types and pottery (Aner and Kersten 2011: Die Funde, Band XX; No. 9852 of a Boiu sword in northern Germany, plus other southern items, no. 9853 and 9855A; Cupitò 2006: figs. 37–38 and 65). Figure 4.5 illustrates the extension, and some of the content of these networks, which were kept together by treaties and political alliances between the chiefdoms or rather kingdoms along the route, which in turn provided logistics and support for the traders. Evidence of dynastic marriages between chiefdoms/kingdoms along the route have long since been demonstrated archaeologically (Jockenhövel 1991; Kristiansen and Larsson 2005: fig. 107; Mordant, Rottier, and Saligny 2007). They provided political security for traveling warriors and traders, and although local warfare always contained a risk to the system, the benefits of maintaining stable alliances prevailed.

1200–1100 BC: THE PERIPHERY HITS BACK

Mercenaries, Sea Peoples and the Fall of the East Mediterranean Palace Economies

Between 1600 and 1200 BC a remarkable civilization flourished in the Po delta, named the Terramare culture. However, after 1200 BC, most of the central area of the Terramare settlement was left in several huge exoduses: An estimated 120,000 people left (Vanzetti 2013: fig. 4.6). Only in the northern part of the settlement did people stay, as they had a more robust economy linked to the northern amber trade and the rise of Frattesina as a coastal hub (Cupitò et al. 2012). It took several hundred years to resettle the central and southern delta. The question is: What were the causes of this exodus, and where did the people go? To provide an answer, it is necessary first to delve a little more deeply into the dramatic thirteenth century BC.

The thirteenth century BC was a period of power balance between the Hittites and Egypt, testified in the Amarna letters (Cohen and Westbrook 2000). But the battle of Kadesh 1286 BC introduced less stable conditions, as mercenaries were mobilized from surrounding, and perhaps more distant, peripheries. Mercenaries and pirates are two sides of the same coin; it depends on who you work for. Central European weapons, for example, flange-hilted swords, become frequent in the Aegean, and fortifications were erected in Tiryns and other places. The UluBurun shipwreck, with its cargo from around the Mediterranean and further away, demonstrates the "globalized" nature of this period. Mycenaean, Italic, and Canaanite swords identify

some of the travelers. The "Westernizing" of the Aegean was thus an effect of the increasingly intense commercial and social relations between Italy and the Aegean, as reflected in the many settlements with Mycenaean pottery, both local imitations and imports (Iacono 2012: fig. 1.2). Mycenaean potters settled, and with them, in all probability, also traders and colonizers. Mycenaean and Cypriot ships had regular contacts with southern Italy, Sardinia, and the Adriatic, especially Frattesina at the mouth of the Po River, and from here contacts were close with central and northern Europe. But we can trace the Mycenaean impact as far as the Iberian Peninsula (Mederos 2008).

During the thirteenth century BC, the closer peripheries to the Mycenaean and Cypriot palaces were thus increasingly drawn into their realm through a mix of trade, war service by mercenaries, and eventually some dispositions of people as slaves (Bouzek 2011; Mederos 2009). In the Terramare, this combination is testified by the appearance of Mycenaean pottery, and during the thirteenth century, there are Italian-type flange-hilted swords from traveling warriors in several places in the East Mediterranean (Jung and Mehofer 2005–2006, 2014). One such sword was found on the Uluburun ship, which led Susan Sherratt to see this movement as the onset of a more dynamic historical situation with less control from palaces and more private enterprises (Sherratt 2003). However, others have criticized this view, and pointed out that palaces were in reality private enterprises too, just on a larger scale (Dietrich 2010: 191–206; Routledge and McGeough 2009). Be that as it may, there is an increased interaction between the East Mediterranean civilizations and the European hinterlands during the thirteenth century, from the Carpathians to northern Italy. North Italian Pesciera daggers and early violin bow fibula used on clothing accompanied these movements and show that people rather than goods were traveling. After 1200 BC, these very same peripheries, for reasons yet unknown, started to migrate toward the centers of civilization, on land and at sea. These later "Sea Peoples" were constituted by many tribal names, which are mentioned both by Ramses III and in preserved letters between disparate local kings:

> Ramses III in 1186 BC, before the battle with the Sea peoples, describes their victories: "No country could stand before their arms. Hatti, Kode, Carchemish, Arzawa and Alashiya. They were cut off … their league (the Sea-peoples) was Peleset, Tjeker, Shekelesh, Denyen and Weshesh, united lands (e.g. people)."
>
> A letter from correspondence between the kings of Ugarit and Alashiya shows increasing despair: "My father, the enemy ships are already here, they have set fire to my towns and have done very great damage in the country. My father did not you know that all my troops were stationed in the Hittite country, and all my ships are still stationed in Lycia, and have not yet returned?"

> (This letter on clay was burnt and preserved precisely because of the disaster).

In these examples, a chain of events is at work where vassal kings send troops to help far away (in the Hittite lands), and then badly need them later when the victorious enemy arrives, as described by Ramses. So who were they? In the depiction of the sea battle at the Great Temple of Medinet Habu, there are several clues about the invaders: They were coming to settle, some of their ships had characteristic sea-bird sterns, and they used horned helmets. Swan-headed sterns are well known from Central Europe to the Aegean, including Italy, as the following examples show. Were Mycenaean and/or Central European warriors among the Sea Peoples? The warriors depicted at Medinet Habu in Egypt are hybrids; the shields can be found from Denmark to Ireland, the helmets have parallels in Sardinian figurines, whereas the dress is east Mediterranean. We find the same mix on the famous warrior vase (Sandars 1978). The Terramare populations could quite certainly have been among them, but first the archaeological evidence and the question of their exodus will be considered in more detail.

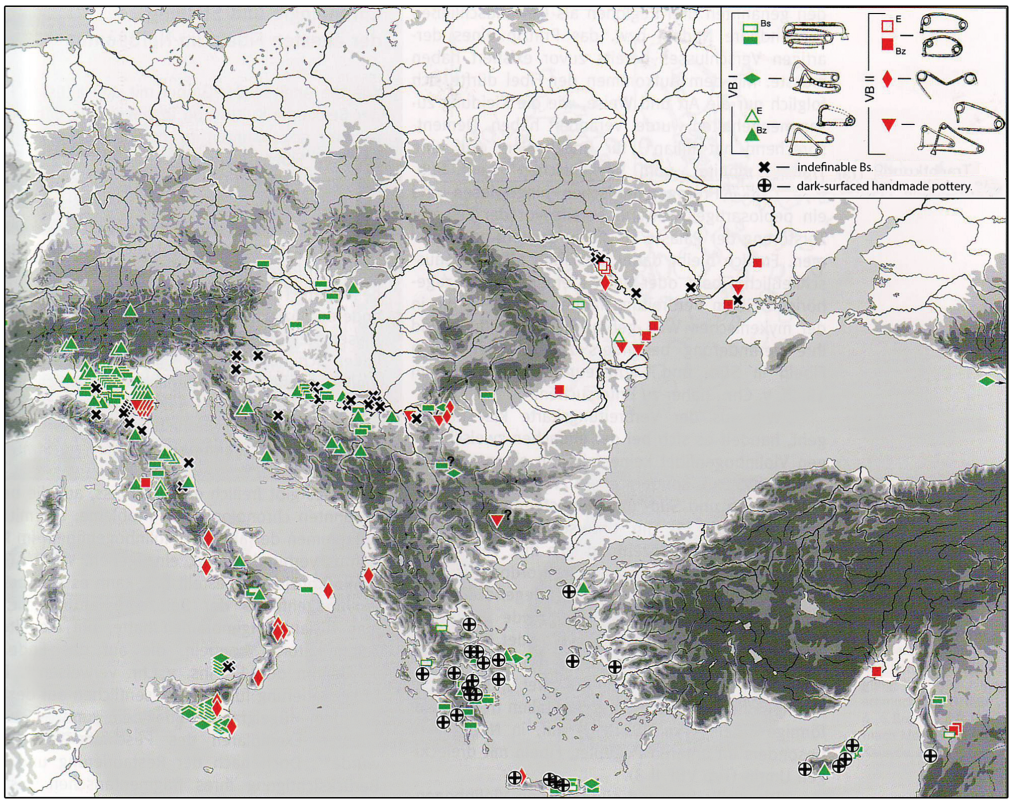
Why did people leave the Po delta around or shortly after 1200 BC? Increasing demographic pressure is one factor. Some settlements expanded from the average 1 to 2 hectares to 20 hectares in the late phase, when a settlement hierarchy was firmly established (Cardarelli 2009: figs. 5 and 7). However, that process had already accelerated starting in the fifteenth century onward. It went hand in hand with the use of force. Evidence of Bronze Age injuries is becoming more common in modern excavations with osteological analyses. In the Middle Bronze Age cemetery from Olmo di Nogara (Verona) in the Terramare region, 16 percent of the skeletons showed lesions from combat from axes, swords, and arrowheads (Cansi, Contursi, and Fornaciari 2005; Cansi, Gaspari, and Maino 2009). This percentage seems rather high, as many injuries need not hit bones. It can be assumed that there was frequent warfare during the Terramare occupation of the Po delta, which corresponded with extensive fortifications (Cardarelli 2009: fig. 4.6). Increasing competition over resources in combination with political/demographic pressure, and the onset of a colder and wetter climate after 1400 BC, and lasting until 1200–1100 BC, may be among the factors that finally trigger the exodus in this delicate wet area. Although a fertile environment, there is now also evidence for the cultivation of millet in the Terramare settlement (Tafuri, Craig, and Canci 2009), which is also an indication of more pressure on the environment. It agrees with the pollen record that shows increasing signs of crisis and overexploitation after 1300 BC (Mercuri et al. 2006). However, it does not explain why *all* settlements in the Po Plain were abandoned around and after 1200 BC. Several consecutive years of drought is a well-known phenomenon also in the historical era, and

has been favored by Cardarelli as a triggering factor (Cardarelli 2009: 465ff.). It is supported by recent research that has documented a drop in groundwater level prior to the abandonment. As water management was an important part of the intensive agricultural regime, in part based on irrigation, such a dry, climatic event could have had disastrous effects (Cremaschi, Pizzi, and Valsecchi 2006).

A combination of all these factors probably led to a joint decision to leave and settle in areas they were already familiar with, such as the Aegean, and southern Italy/Sicily. Such communal decisions, like Caesar described it for the Helvetii, are not uncommon in connection with migrations, and they are often well-planned events with a well-known destination, as in the case of the Pueblo societies of the American Southwest (examples in Cabana and Clark 2011). There are many indications of frequent contacts with Mycenaean people, from pottery, faience, and glass beads to the increased use of grapes probably for wine during the fourteenth and thirteenth centuries BC (Cupitò 2011; Mercuri et al. 2006: 55). These regular contacts were focused on the amber trade with the north, among other things (Radina and Recchia 2010), but soon led to other forms of exchange and travels. Contacts with the Aegean were thus well developed and made planning of the exodus easier. However, it is also clear that several settlements migrated to more nearby regions of central Italy, which implies that the exodus was a series of planned events with different destinations (Cardarrelli 2009: 487ff., figs. 9–21).

The map of violin bow fibulae in Figure 4.6 shows where people went because the fibula was part of dress. The early distribution is mostly to the east Mediterranean, which is supported by a map of dark, burnished, handmade pottery ("impasto" in Italian) of foreign (mostly Italic) type. It follows the same route and shows a similar distribution (Lis 2009). We may also note the close contacts with the northern Balkans and Hungary, which could have spurred further overland migrations. Thus, it seems that the Terramare migration primarily was headed toward the Aegean and Crete, and in some areas such as Arcadia, there are genuine Italian flange-hilted swords in local, richly furnished graves, suggesting that they had succeeded in becoming local overlords (Giannopoulos 2008). The fact that Italian "impasto" pottery only makes up a small part of the total pottery repertoire in most settlements reflects the well-known experience that migrants and colonizers from a less developed culture rapidly adopt the superior culture, similar to the Viking Diaspora in the British Isles and France. It also seems clear Mycenaean palaces were unprepared and taken by surprise, just as happened when the Vikings first attacked the English coasts (Maran 2009).

Although the Sea Peoples were made up of many ethnic groups, there is much to support the idea that northern Italy and the Terramare exodus represents the kind of major triggering force, which in turn leads to other



4.6. The distribution of violin bow fibula from thirteenth century onward showing the movement of people between northern Italy, Illyria and the Aegean, Crete, and the parallel distribution of "foreign" dark-surfaced handmade pottery (based on Kasuba 2008: abb. 15; Lis 2009).

upheavals along the way – especially if the centers were preoccupied with internal conflicts such as the Trojan War, which reflected the ongoing competition between Hittite and Mycenaean kingdoms (Mederos 2009). There are clear parallels to the situation in southwestern Europe 800 years later when Celtic tribes started to migrate, which set the scene for two centuries of migration and colonization, later followed by return migrants. Thus, part of the Mycenaean populations might see better prospects in joining the Sea Peoples than staying at home. Shelley Wachsmann has convincingly argued in his recent book about the Gurob wooden ship-cart model in Egypt that it represents a Mycenaean galley, produced and buried by the now settled Submycenaean/Central European populations from the Sea People invasion (Wachsmann 2013).

Likewise, Andrea Cardarelli argues that the Terramare groups that migrated to the Aegean and Crete are synonymous with the "Pelasgians" in later literature (Cardarelli 2009: 472ff.), echoing the historical impact these turbulent decades left on oral tradition in succeeding centuries.

CONCLUSION: FROM BRONZE AGE WORLD SYSTEM TO BRONZE AGE VALUE SYSTEM

I have demonstrated how the Bronze Age saw the universal adaptation of new forms of efficient transport on land and sea, as well as a new political economy that made it possible to carry out long-distance travels and trade protected by treaties and other institutionalized forms of social and political guest-friendship. Although European societies beyond the city-states of the Mediterranean did not adopt writing and urbanization, they adopted the new technologies linked to trade and transport as well as organized warfare, and these allowed them to interact systematically with the more complex societies in the Mediterranean. They created an economic world system of metal trade, and in the process goods and services, including tin, gold, amber, warriors, and slaves, were also exchanged from the closer and more distant peripheries to the centers. Economically, it introduced a commercially based commodity trade in metal to the European Bronze Age societies that soon included gold, silver, amber, and probably also slaves and woolen textiles. New lifestyles and their accompanying institutions were adopted in the process, which reflected the assimilation of new values.

Certain regularities seem to emerge from our study: Highly valued products such as lapis lazuli, amber, or tin, could be traded over several thousand kilometers from their point of origin to the centers of civilization. This trade, however, was based upon the existence of regional so-called Peer Polity trade networks in staples such as copper and wool/textiles, which typically spanned from 500 to 1,000 km. What can be seen is the continuous integration of new peripheries with high-value products into the commercial trading circuits that provided return products such as copper and woolen textiles. Such processes also introduced new social values, lifestyle changes, and ultimately institutional changes toward more complex societies, as seen in all four case studies. It represented the geographical expansion of a Bronze Age world economy, which also introduced new civilizational idioms. However, our cases reflect two types of center–periphery relations: one that transforms the periphery into a new center, and one that integrated the periphery into a long-distance trade relationship that selectively introduced new values and institutions.

- In the southern Caucasus, the Trialeti culture adopted highly sophisticated rapiers, richly decorated silver and gold vessels from the Bronze Age city-states, Kanesh being one of them. In exchange, it provided silver and transmitted chariots and horsemanship, and was later closely linked with the Mitanni kingdom. It remained a periphery, although transformed.
- In Mycenae rich burials of the founding chiefs and kings in grave circle B, and later A, is evidence of their close relations with the Minoans and other

east Mediterranean city-states. In exchange, the Mycenaean provided silver and horses from the Carpathians, and, not least, copper from Lavrion. Later, they conquered their former masters and became the new great power in the central Mediterranean.

- In the more distant peripheries, in south Scandinavia, a Mycenaean cultural style idiom was adopted, which also included the dual institutions of Wanax and Lavagetas (Nordic parade swords vs. international flange-hilted swords), and aspects of Mediterranean lifestyle, such as campstools. However, they remained at the chiefdom/prestate level of organization. The same is true of the north Italian Terramare culture, which, however, nurtured closer and more direct trade relations with the Mycenaean.
- For all Europe/western Eurasia long-distance political treaties/ alliances emerged that allowed warriors and traders to move and get logistic as well as political protection. It supported a new trade economy in metal and other valuables, such as amber, gold, and tin.
- It led to the formation of new larger regional identities, such as Nordic, Tumulus, and so forth that followed logically from this new international system of alliances.
- Closer peripheries, such as Italy and east Central Europe, were increasingly drawn into Mycenaean and Hittite conflicts providing mercenaries, which in the end led to the downfall of these civilizations.

A package of shared values thus accompanied these interactions. In effect, it created a Bronze Age value system that allowed traders, warriors, and other people with relevant services on offer, including sailors and craftspeople, to travel between chiefly courts and even take service at distant centers such as the Mycenaean palaces – just as some specialists from the palaces may have found new options for their trade in the closer peripheries, as seen during the thirteenth century BC when not only Mycenaean pottery moved west and north but also the production of Mycenaean body armor. This increasing commercial interaction and cultural transmission between centers and peripheries has much in common with the later Roman interaction with the barbarian, Germanic world, and in both cases it paved the way for a later Dark Age by allowing the periphery too much influence, thus tipping the balance when centers were off guard or periodically weakened by internal conflicts. Such a commercialized world of global trade and cultural transmission sets the Bronze Age apart from everything preceding it, and forms the historical foundation upon which the later civilizations would develop.

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FIVE

INTERLOCKING COMMERCIAL NETWORKS AND THE INFRASTRUCTURE OF TRADE IN WESTERN ASIA DURING THE BRONZE AGE

Gojko Barjamovic

The Old Assyrian commercial system is perhaps the best-documented example of a long-distance trade network surviving from the ancient world. The term "Old Assyrian" used here refers to the historical period ca. 1950–1750 BC in Northern Iraq and Turkey, as well as the particular linguistic stage and material culture associated with it (Larsen 2015). In archaeological terms, it is coterminous with the early Middle Bronze Age (MBA I) in Turkey (Sagona and Zimansky 2009). Geographically, it is focused on the archaeological site of Kültepe near the modern-day Turkish city of Kayseri.

Almost seventy seasons of archaeological excavations at the site have revealed the remarkable remains of a thriving Bronze Age city that bore the ancient name of Kaneš (Kulakoğlu 2011). The settlement covered an area of at least 150 hectares and consisted of an acropolis with temples and palatial structures, as well as a surrounding lower town with compact industrial and residential quarters enclosed by a fortification wall (Barjamovic 2014). Perhaps as many as 25,000 people lived in the city. So far, archaeologists have unearthed some nine hectares of narrow winding streets, small squares, and more than a hundred multistoried houses (Hertel 2014). A river passed through town, providing it with water and serving as an outlet for its sewage (Barjamovic 2011: 238). The settlement was destroyed in a conflagration around 1850 BC (Barjamovic, Hertel, and Larsen 2012; Manning et al. 2016), thus sealing the houses under burnt rubble and preserving their remains for posterity.

In addition to a large local population, Kaneš was home to an Assyrian merchant colony of some 500 people engaged in an extensive overland trade in raw metals, wool, and textiles. This colony was the main hub for some three-dozen other Assyrian trading settlements, spread across central and southern Anatolia (Larsen 2015), shown in Figure 5.1. Home to the traders was the oligarchic city-state of Assur, located on the Tigris River some 950 km to the south of Kaneš, in contemporary Northern Iraq.

The reason why the Old Assyrian commercial system is so well documented is an exceptional corpus of some 23,500 merchant records written on clay tablets coming from the private archives of the traders living at Kültepe. In addition to the exceptionally well-preserved physical remains of their houses (Özgüç 2003), this archival material offers unique insights into the way large commercial structures could function over long distances. The closest structural parallels to these records are found in the medieval town archives of the North Italian city-states and in the Cairo Genizah (Larsen 1976). The Assyrian texts draw a picture of free stock enterprise based on private initiative, risk-based and profit-seeking behavior, free-floating capital, bearer's checks, and similar "modern" features (Veenhof 1997) within in a world that is otherwise thought to have been characterized by centralized or communal ownership of land, water and storage, fixed prices, and state merchants.

For this reason, there has been a tendency to shelve the Old Assyrian evidence as "anomalous" in broader studies of ancient economy and trade. It has been presented as an exceptional case in a world dominated by redistribution and a state-controlled exchange of luxury items destined to embellish the social prestige of a wealthy elite (Renger 2007). Debates have been characterized by a seemingly eternal and mostly unproductive battle between "formalists" and "substantivists," where discussions are construed in terms of binary oppositions informed by the works of Weber and Polanyi (Aubet 2013; Warburton 2016).

However, a growing understanding of the chronology and geography of the period precludes the interpretation of the commercial phenomenon at Kültepe as a local anomaly. Instead, a rapid influx of new data, and a collaborative and cross-disciplinary effort to deal with this evidence, now allows us to link the Assyrian trade to a chain of contemporary interlocking commercial networks that ultimately connected the Chinese frontier with the Balkans around 1900 BC (Barjamovic 2008). By examining the network of interconnections that linked the Assyrian system to other commercial circuits, and by exploring the physical, political, and social effects commerce had on society, one may draw a number of general conclusions about the way in which ancient long-distance trade operated under the assumption that observations made on the basis of the well-documented Assyrian case may also be valid for times and places where less evidence is available.

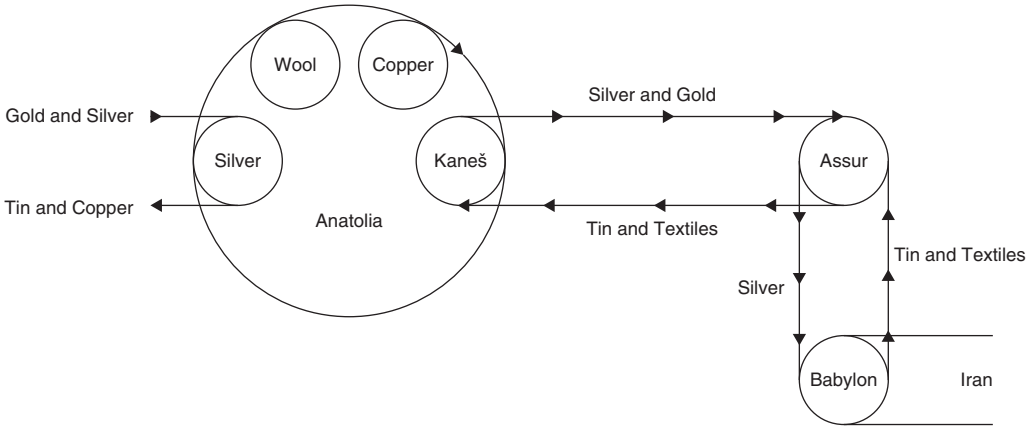


5.1. The Assyrian network of trade in Anatolia, ca. 1880 BC.

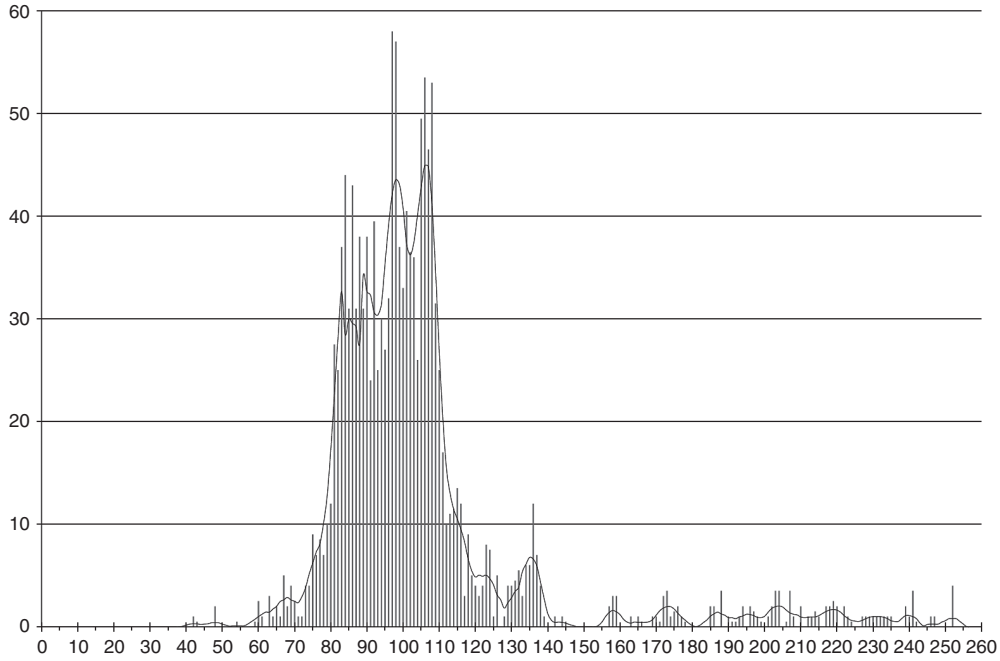
The model of exchange shown in Figure 5.2 has been around in various forms for more than fifty years (cf. Larsen 1967), but new data brings the model to life and adds a depth of detail in terms of the volume of the international trade and the physical organization of early networks of exchange. Although the Assyrian system of trade has been understood in its main outline for more than half a century (Garelli 1963), it has until recently been a stumbling block that no reliable internal chronological framework existed for the period, and that our understanding of the geography of the exchange remained moot at best. Both points are problematic because the system involved a traffic of goods in large quantities over long distances within a series of interdependent and overlapping circuits of trade. To comprehend the system, both the spatial and the temporal component need to be understood correctly.

The problem of the internal chronology of the Old Assyrian period has been solved by a series of newly published documents that list the sequence of Assyrian town officials after whom each year was named (Barjamovic, Hertel and Larsen 2012; Günbattı 2008; Manning et al. 2016; Veenhof 2003). For the first time, this allows data to be quantified and interpreted according to a temporal framework, and to address aspects of trade intensity and volume that were not possible earlier. The graph shown in Figure 5.3 plots the chronological distribution of some 1,100 dated Old Assyrian documents. The distribution is shown as a column graph with a median line.

It immediately becomes apparent that the dated material from Kültepe increases dramatically around year 80 of the internal chronology, and that it declines as sharply again around year 110. This thirty-year span reflects the



5.2. A model of exchange (adapted from Larsen 1987).



5.3. The chronology of exchange (from Barjamovic, Hertel, and Larsen 2012).

commercial enterprise driven by just a single generation of enormously successful traders. It has long been suspected that a majority of the texts from Kültepe came from a narrow time frame, usually thought to cover forty to fifty years. But the actual picture presented by this graph confirms in a dramatic way that close to 90 percent of the evidence stems from a very short and narrowly defined period (Barjamovic, Hertel, and Larsen 2012). This observation

has several important repercussions, not least for an assessment of the intensity of commercial activities. It is evident why it has great impact on any attempt to establish reasonable estimates of the volume of trade because it compresses the evidence and the number of transactions conducted by the Assyrian merchants into a shorter time span.

In view of the fact that less than half of the texts found at Kültepe have so far been analyzed, it is a complex task to establish satisfactory estimates of the volume of goods traded through the Assyrian commercial circuit. Already Veenhof (1972) went through the caravan texts that mention actual shipments between Assur and Kaneš. He had less than 3,000 texts to work from at the time, but came up with a total of 13.5 tons of tin and 14,500 textiles by adding up all attested transactions. There are now three times that number of texts available, and although there is currently no tally of the total amount of textiles referred to in the Old Assyrian texts, the figures for the most common type of fabric sold by the Assyrians – the *kutānum* – are known. A recent count conducted by Lassen (2010a) reached a number of more than 32,000 pieces of these textiles alone, and because about 90 percent of them would have been traded during the densely documented thirty-year period, it means that direct evidence exists for an average of 1,000 *kutānū*s being traded by the Assyrian merchants each year.

It should be emphasized that these textiles were highly valuable items, and that a single piece could fetch the price of a slave, a donkey, or even a house. However, the number of *kutānū*s found by Lassen is based on a sample of just 9,900 tablets to which scholars working with the Old Assyrian period currently have access. Another 13,000 tablets still lie unread and unedited in the drawers of the Ankara Museum. In addition, a comparable number presumably awaits the archaeologists in the ground at Kültepe. Finally, there is currently no solid estimate of how large or small a proportion of the original documentation survives. Likely, it is but a fraction.

Assuming that the material currently inaccessible has pretty much the same character as what is known to us, a conservative estimate of the total number of textiles sent to Kaneš during the best-documented period of thirty years 1890–1860 BC would total 100,000 pieces. This corresponds to some 3,300 textiles, or about 130 donkey loads per year (Larsen 1967: 148). There are many signs that this figure is much too low, but at least it offers a baseline from which to work (Barjamovic 2011: §1.3).

Another attempt to address the problem of volume was made by Stratford (2010) based on a small dossier of caravan records coming from a single merchant archive at Kültepe. His approach was to isolate just three-dozen texts, and to show how this dossier revolves around activities that took place within the span of just one to two years. By calculating the total volume traded by the merchant during that period, and by multiplying the number by 15 to

30 to account for his entire active career, and then multiplying this number once more by 50–100 to reflect the total number of Assyrian firms active in the Anatolian trade, he reached a number of annual donkey loads in the low thousands.

For various reasons, Stratford's numbers may be too high. Firstly, the merchant who Stratford studied (a man named Pūšu-kēn) was by all accounts a particularly prosperous one. Secondly, the dossier of texts he used may stretch over more than one or two years: perhaps as many as three to four. This alone would halve the volume (but see Stratford 2017: ch. 18). Thirdly, it is of course difficult to know whether the dossier under investigation is representative for the merchant's entire career. And, finally, the total number of Assyrian firms or trading families present at Kaneš is difficult to assess; currently, close to 40 merchant archives have been excavated, but whether the original number would have been 50 or 100 is unclear. Neither the details in respect to the organization of the trade, nor whether one "family" corresponds to one "firm" or a single "archive" are fully understood. In conclusion, the statistical basis of the calculation is necessarily based on conjecture, and the total figure could be off by a factor of ten.

Nevertheless, even at such a reduction, the volume of trade is well beyond anything else known from the Bronze Age. And a third attempt to assess the volume of Old Assyrian trade conducted in this article seems to support the very large quantities found in Stratford's conclusion. This third approach combines calculations based on the so-called declared values (*awītum*) of the caravans leaving Assur with records that offer data on the way those caravans were financed and organized.

The term *awītum* is thought to represent the estimate offered by authorities in Assur of the value of a given caravan as it stood ready to depart for Anatolia (Dercksen 2004: 151ff.). The figure was calculated with tin as its currency, and was used as a basis for taxation much in the same way a declaration of value is now pasted onto the front of a sealed postal package. There are only three such *awītum* statements preserved among the extant Old Assyrian records, but the surviving examples seem to suggest that the caravans whose value was being declared consisted of animals and staff belonging to several individual merchants. The texts in question relate to three caravans formed by the pooling of investments belonging to eight, twenty-one, and thirty-four merchants, respectively.

The largest of the three declarations pertains to a caravan headed by a merchant named Imdī-ilum (Veenhof and Klengel-Brandt 1992: 29f.), and the joint shipment of the thirty-four investors had a total declared value of 12.3 tons of tin. There is no specific reference to the goods it contained, but if we assume that it carried the usual 50/50 division of tin and textiles, then it would have held some 6 tons of tin and 12,000 textiles carried by more than 500

donkeys. The total expected yield from these wares would be an astronomical 3 tons of silver minus tolls and return taxes to be divided between the thirty-four investors. This corresponds to about 66 kg of silver per trader. In comparison, the annual cost of living for a single individual in Kaneš can be calculated to approximately 0.5 to 1 kg of silver per year (Dercksen 2014: 96–99).

Figures can be double-checked by referring to shipments of silver resulting from the profits of trade as they were returning from Anatolia to Assur. Such profits were likewise taxed according to their declared values, but calculated with silver as their base currency. The largest declaration refers to a consignment of more than half a ton of silver owned by eight traders (Dercksen 2004: 161f.). The proportions seem to match the outgoing traffic and support the conclusion that the documents do not reflect a fictitious value calculation.

Independent verification of this interpretation is difficult to obtain due to a lack of direct references to such large caravans in the Assyrian records. Only the individual accounts of each merchant are found, and these deal with much more modest quantities. In fact, the largest detailed record of a single transport relates to a shipment of just thirty-four donkeys (Larsen 2010: nos. 143–145). This circumstance, and the scarcity of texts listing the declared value of caravans, necessarily renders all interpretations tentative. Alternative explanations of the records to the one offered here are possible, and for instance, one might argue that the *awītum* documents reflect a particular type of long-term partnership and do not relate to a single consignment.

There is, however, incidental evidence to support the existence of large caravans crossing the region. A dossier of letters addressed to a ruler in Syria refers to an Assyrian caravan of 300 donkeys and 300 men passing through the region (Barjamovic, Hertel, and Larsen 2012: 76). Also a surviving commercial treaty between Assur and a city on the route to Anatolia counts the Assyrian caravans in fractions of 50 and 100 donkeys for the purpose of taxation (Veenhof 2008a). It is therefore possible to defend the proposition that the *awītum* texts relate to large caravans, probably integrated into a single transport unit for practical reasons of movement and safety.

To get an idea of the total volume of the trade, the next step is to determine whether there were only a few such large "pooled" caravans leaving Assur for Anatolia each year, as might be expected based on historical parallels, for example from the silk trade between Basra and Aleppo in the eighteenth century of the Common Era (Abdullah 2001). The important fact that both the letter referring to the 300 donkeys and the commercial treaty previously mentioned date to a period almost a century after the great bulk of our texts from Kültepe could be taken as a sign that commercial procedures had changed, and that, in this later period, transports were organized into huge caravans, for example due to diminished security or changes in taxation (Barjamovic, Hertel, and Larsen 2012: 76–77).

However, the "paper trail" connected to the Assyrian caravan traffic from the main thirty-year period of documentation seems to support the calculations offered here. For instance, there are records that list individual merchants, who invested their funds in two-dozen or more caravans, which all appear to have left Assur in the same season. Perhaps their conduct reflects an attempt to spread out risk, or it may have been linked to social reasons, or a constant need for cash from a swift turnover. Whatever the motive, one record (Kt c/k 260, cf. Dercksen 2004: 164) appears to list a single merchant's investment of a total of 33 kg of silver in fourteen individual caravans (*ellatum*). Two of those caravans took goods worth half of his investment, while the rest of his assets were spread out as relatively modest sums in each of the twelve remaining transports.

Even with a conservative estimate of ten caravans of 150 animals leaving the city each season, the approximate number of donkey loads would approach what was proposed by Stratford. Thus, regardless of the way chosen in the attempt to assess the volume of trade, the records point to extensive traffic involving several hundreds of men and animals moving between Assur and Anatolia each year. The archival analysis and the statements of declared value both suggest that the volume traded was much higher than what is implied by a direct count. This result is hardly surprising because it is difficult to accept that evidence of each and every transaction would have survived to this day. Based on the declared values, one may carefully suggest that some 1,500 donkeys made the journey to Anatolia each year during the best documented period, carrying with them 15 tons of tin and 32,000 textiles.

Statistics such as these obviously come with serious problems. But even when only the directly attested goods are taken into account, the figures raise important questions about supply and demand. Who would need a thousand luxury textiles per year, and what would they do with a ton of tin? These questions lead to the study's second issue, which relates to the possible origin and destination of the goods recorded in the Assyrian texts and the phenomenon of interlocking circuits of exchange.

The textiles traded by the Assyrians were for the most part imported. The city-state of Assur did produce some fabrics for export, but the major part of the merchandise came from the populous cities of Babylonia to the south. A key observation is that the Assyrian merchants never went themselves to get these goods. They had to wait – sometimes impatiently – for the wares to arrive in their city, and there are occasional references to the market drying up without the Assyrians being able to do anything about it.

Evidence for the textile production in Babylonia during this period is sparse. However, from a century earlier, there is detailed documentation for an industry that employed at least 9,000 people in the port town of Gu'abba

alone (Laursen and Steinkeller 2017; Waetzoldt 1972). Almost every step in this production is documented, including breeding, herding, plucking, sorting, combing, coloring, weaving, fulling, washing, and storing. The total textile production in Babylonia at the time is unknown, but its densely populated cities certainly had a capacity to produce tens of thousands of pieces each year.

The tin also arrived in Assur from the south, although its ultimate point of origin remains unknown. Substantial mining operations in Central Asia that were exploited from the beginning of the second millennium BC could feasibly be a source (Parzinger and Boroffka 2003). Recent analyses trace tin used in a bronze alloy at Hissarlik in Western Turkey to mines even further away – to Eastern Kazakhstan on the Mongolian frontier (Stöllner et al. 2011). Ancient tin mines and production sites much closer to Assur are known, but so far their volume is marginal, or their date precedes or postdates the Old Assyrian records (Helwing 2009; Pigott 2012; Yener et al. 2015).

In addition to tin and textiles, the Old Assyrian merchants trafficked in sizeable amounts of lapis lazuli, a stone that originated in Badakhshan in easternmost Afghanistan (Muhly 1985: 281, 285). It presumably came to Mesopotamia by some of the same routes as the tin. A few records also mention Assyrians carrying spices and fragrance (cf. e.g., Larsen 2010: no. 144), some of which presumably arrived from the south and east as well (Warburton 2003).

The early Old Assyrian ruler Ilušuma left an inscription in which he refers to tax exemptions given to the Babylonians on the market in Assur (Grayson 1987: 17f.). He specifically mentions copper, and does not mention tin, which may be related to the early date of this text. However, the text does delineate what appears to be three main routes leading to Assur from the south, as shown in Figure 5.4: one from "the edge of the marshes" through Ur and Nippur, one from Awal and Kismar in the Hamrin region, and one from Dēr on the road to Susa (Larsen 1976: 76f.).

The first route probably refers to the Gulf trade, which at this time connected Ur to Dilmun and Magan through a naval trade in copper (Laursen and Steinkeller 2017). The second route descended the Zagros Mountains alongside the Diyala River and crossed the Jebel Hamrin (Steinkeller 2013: 295), presumably following the traditional road east of the Tigris to the north. The third route linked Dēr to Susa and further to Central Iran. The inscription is of little help in establishing the ultimate source of the tin and the way in which it was brought to Mesopotamia, but it does support the notion that several routes and probably also several source areas were in use at any one time (cf. Wilkinson 2014: §7.2.6).

Here it should be kept in mind that the Old Assyrian records only refer to one branch in a much wider network. Volumes of metal similar to (or much larger than) the ones recorded at Kültepe would presumably have been consumed in the densely populated areas of Elam, Babylonia, the Levant, and



5.4. Possible routes through Western Asia.

Egypt (Warburton 2003). With the growing understanding of the historical geography of the Old Assyrian period, it has become clear that the merchants from Assur controlled only the *link* between Assur and Anatolia, and that they operated a commercial circuit exclusively within the borders of central Anatolia (Barjamovic 2011).

The Assyrian route to Anatolia passed through a number of polities in the Syrian Jezira, which at the time were independent microstates. Although the sources admittedly focus on Kültepe, one gets the impression that the Assyrian caravans simply passed through the Jezira without conducting any serious business there (Barjamovic 2008). Trade only began once the caravans crossed the Euphrates and the intermediate territory was to some extent outside of their boundaries.

Based on the discovery of ratified commercial agreements, it is known that the Assyrian network was based on mercantilist principles of geographical monopoly and strong political protectionism guaranteed by treaty (Veenhof 2013). It is therefore probable that merchants from elsewhere held similar monopolies on the trade within, for example, Lebanon, Syria, Cilicia, and the southern part of the Anatolian plateau where Assyrian presence is lacking.

This regional specialization and the existence of zones of commercial monopoly are of particular interest when linked to the apparent rise in the household use of metal at the turn of the second millennium BC across Western Asia. It suggests that sizeable commercial networks in the region were in operation and capable of handling a dramatic increase in supply and demand of raw metal. Bronze working is of course well known from earlier periods, and

tin-bronzes, arsenical bronzes, and triple alloys have been found in the region at least a thousand years earlier than the Old Assyrian Colony Period (Lehner 2014). Records from the twenty-fourth century BC Palace G at Ebla refer to large quantities of bronze, often in the form of weapons and armor, and the metal occurs with some frequency in the records of the Ur III chancery as well.

However, it appears that bronze did not venture far beyond the institutional contexts in which it is mentioned prior to 2000 BC. This seems to shift abruptly around the year 2000 BC, as shown by recent analyses of cut marks on animal bones conducted by Haskel Greenfield (2013). His published work has so far concentrated on sites in the southern Levant, but his ongoing studies of material from Anatolia produce results that follow a similar pattern (pers. comm.). Assemblages of animal bones from domestic contexts in the late third millennium across a large number of sites consistently show that about 90 percent of the processed fauna was butchered using stone implements, and that only some 10 percent of the animals were cut up using metal tools. This pattern reverses entirely in layers dating to after 2000 BC, so that 10 percent of the bones bear the markings of stone tools, while 90 percent are cut with metal. Tin-bronzes also begin to dominate the archaeological record in Mesopotamia after the turn of the millennium and grow more common in Iran alongside the triple alloys (Avilova 2008).

The important discovery that metal seems to have entered common household contexts around 2000 BC, and that this happened quite abruptly, suggests that the large quantities of tin and copper recorded in the Assyrian texts were part of a geographically wider shift in patterns of commerce and consumption. Perhaps the change in the status of bronze from being a palatial luxury to becoming a household resource ultimately was an effect of the aggressive commercial agenda of the Ur III state (Steinkeller in press). Certainly, it appears to coincide with the establishment of the trading system evidenced in the records from Kültepe a few generations later.

The city of Assur belonged to a group of micropolities that were specialized in trade and transport, much in the same way the later Hansa or the North Italian cities were (Larsen 2000). Although it remains unclear how or why the merchants from Assur came to dominate the import of tin to central Anatolia, the fact that tin was a strategic resource seems to have played a role in the arrangement. It appears that local authorities in Anatolia demanded that the Assyrians bring a certain proportion of tin in their shipments as a precondition for them to engage in the lucrative textile trade (Veenhof 2008a: 212f.). The tin was purchased for silver at an average rate of 15:1 on the market in Assur and sold in Anatolia for an average rate of 7:1, but a considerable part of the profit seems to have been eaten up by taxes, transport to and from Anatolia, and interest on the investments that the shipments represented (Dercksen 2014: 75–83).

More substantial profits were generated in the textile trade. A standard *kutānu* textile that sold for 1.5 to 2 shekels of silver in Sippar (de Boer in prep.) was bought in Assur for 4–5 shekels of silver and typically sold for 14–16 shekels of silver in Anatolia (Larsen 1967). Part of the argument for an Assyrian monopoly on the tin trade appears to have been the ability to guarantee a constant supply of the metal. The presence of tin ores in Turkey (Yener et al. 2015) suggests that the Assyrians were able to offer the tin at a competitive price, and implies that the gap in value of silver between Anatolia and Mesopotamia drove the trade. The fact that textiles are absent from the list of goods that were exempt from taxes in the royal inscriptions of both Ilušuma and his son Erišum I suggests that this important commodity was, in fact, taxed upon arrival in Assur from the south. It also implies that traders in textiles coming from Babylonia needed less motivation to market their goods at Assur, and it could perhaps explain why the price of textiles was doubled in the relatively short distance (350 km) from Sippar. This interpretation presumes that the textiles had cleared customs before they were bought by the Assyrian merchants, in a procedure similar to the one known from Kaneš.

The establishment of permanent trading colonies in Anatolia, an ostensible neutrality in a politically fragmented landscape, and the professionalization of transport and finance gave the merchants from Assur a comparative advantage over local dealers. Probably for this reason, the Assyrians eventually took control of an extensive local Anatolian trade in copper (Dercksen 1996) and wool (Lassen 2010b). Detailed references to this local trade again point to very substantial volumes: In one case, a single transaction involved 23 tons of copper and 15 tons of wool (Larsen 2007: nos. 89–111). References to the transport of copper by the ton are not uncommon (Barjamovic 2011: 374).

The documentation never refers to shipments of copper going south to Assur from Anatolia (despite claims found in some of the older literature). Instead, the great copper markets were located in the Pontic region on the Black Sea coast, whence the Assyrian merchants brought it to the city of Purušhaddum alongside part of the tin and textiles that they had imported into Anatolia (Barjamovic 2011; Erol 2015). Purušhaddum constituted the western limit of the Assyrian zone of trade in Anatolia and functioned as the principal interstitial market from where goods passed on to other traders, presumably to be brought down the river valleys to Thrace, the Aegean, and beyond (Barjamovic 2008). The key observation is that the wares left Assyrian hands in Purušhaddum, and that the city was a gateway into the next trade circuit. This would mirror the situation found at the other end of the Assyrian commercial system in Assur.

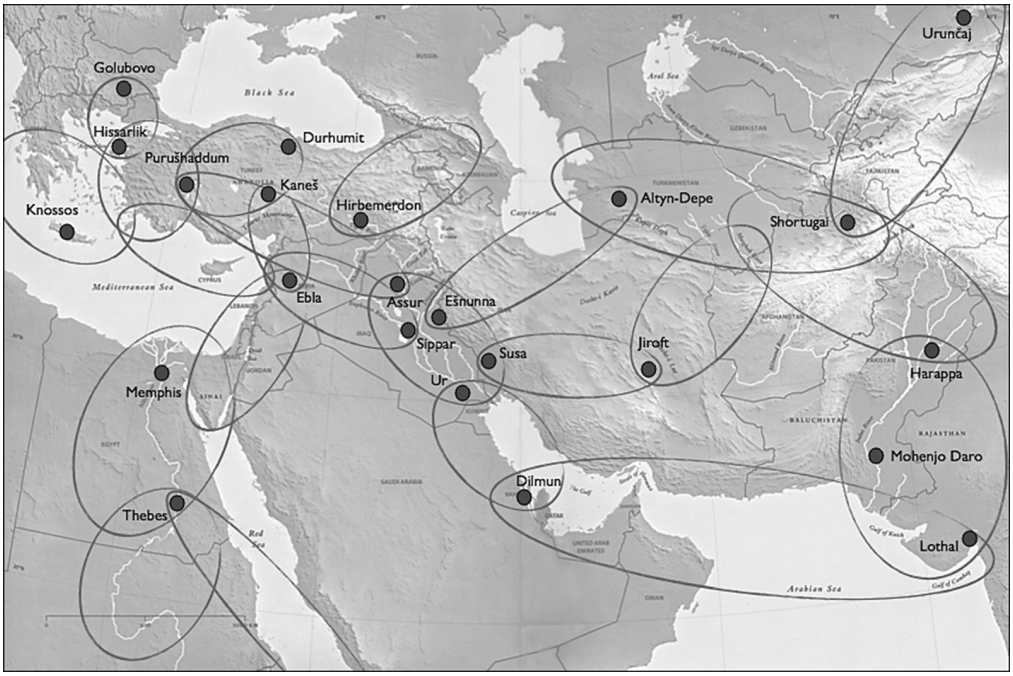
Larsen's model shown in Figure 5.2 basically identifies two parties involved in this trade: first, a hub of major centers of production and consumption located in southern Mesopotamia, Susiana, Syria, and Anatolia, and, second,

a number of satellite societies, which functioned as commercial transit points that managed the foreign trade between the centers of population, production, and consumption. Assur was one such satellite. Other examples are Sippar on the Euphrates, Ešnunna on the Diyala, and Dēr east of the lower Tigris. This model may well present an oversimplification in some respects, but recent evidence supports the notion that a complex transregional system was structured as a number of interlocking circuits.

Trade was conducted by specialized communities that relied upon free agents and foreign commercial settlements; the success of each individual circuit was tied to its capacity to handle the flow of goods passing from and through it. The strength of the system as a whole was that its individual parts to some extent were replaceable: At times when a particular circuit went offline, for example due to war or embargo, trade could flow around the affected regions through alternate circuits.

Unfortunately, the records from Babylonia and elsewhere do not provide a detailed picture of these commercial links. Texts from the city of Sippar record the traffic in some of the same items known from the Assyrian sources: *kutānum* textiles, *amūtum* metal (probably meteoric iron), and lapis lazuli (al-Rawi and Dalley 2000). They reflect a direct trade between Sippar and ports to the south and east, like Ešnunna and Susa, and refer to the existence of commercial procedures comparable to those known from the Assyrian records, such as payments made to temple funds (*ikrībum*). One text suggests the existence of a permanently settled merchant colony of traders from Sippar in Susa akin to the Assyrian settlements in Anatolia (cf. Veenhof 2004; Walker 1980). An archive currently under investigation by Rients de Boer (in prep.) for the first time adds some actual detail to the organization of the caravan trade in the south. These records, which are contemporaneous with the bulk of the Assyrian archives from Kültepe, link the city of Sippar to the routes that brought tin across the Zagros and down along the Diyala River, and they refer to a trade network based on caravans and permanently stationed agents that shipped tin from the east and (tons of) copper from Dilmun along the Euphrates River through Mari into Syria. The presence of merchants from Sippar in Mišlān on the Middle Euphrates (Charpin 1989; de Boer in prep.) and perhaps even at Tilmen Höyük on the Orontes (Marchetti 2011, 2013) further supports the notion that this city was a central player in a network that supplied the Levant with goods from Iran and the Gulf.

That Susa in Elam was a point of entry for overland caravans from further east is also fairly well established, and there is evidence to suggest the importance of a circuit that linked Larsa, Susa, and Ešnunna for bringing tin onto the alluvial plain from Iran (Leemans 1960). Ultimately, a system of interlocking networks can be traced as an ephemeral trail that connects the tin sources on the frontiers of China all the way to Egypt and Central Europe (al-Rawi



5.5. Visual model of interlocking exchange networks.

and Dalley 2000; Barjamovic 2008, 2011; Carter 2012; Carter and Kilikoglou 2007; Cierny and Wiesgerber 2003; Collon 2008; de Boer 2014; Garner 2015; Georgiadis 2008; Helwing 2009; Kohl 2007; Leštakov 1993, 1996, 2002; Parzinger and Boroffka 2003; Pigott 2012; Potts 2008; Poursat and Loubet 2005; Rahmstorf 2006, 2011; Ratnagar 2006; Steinkeller 2012, 2014; Stöllner et al. 2011; Warburton 2003, 2011; Webb et al. 2006; Wilkinson 2014; Wright 2010).

The trade on the Persian Gulf has also been the topic of several studies (Carter 2012: 592–593; Laursen and Steinkeller 2017; Oppenheim 1954), but again there is little evidence for how the system was organized. The port of Gu'abba seems to have held a particularly prominent position until the last century of the third millennium BC. Later on, Ur may have taken over its role as the main seaport in the south, but whether this commercial system was comparable to the Old Assyrian one in terms of organization and infrastructure is unclear. Presumably, the much riskier maritime trade was structured differently and perhaps with more direct state intervention and investment.

Regardless of the scarcity of our evidence beyond the Assyrian part of the circuit, it is certain that a number of infrastructural preconditions would have to have been met for the commercial system to handle traffic as voluminous as what the records at Kültepe contain. These preconditions preclude the possibility that the Assyrian system could have existed as a singular "anomaly" in the Bronze Age world. At the moment, only the Old Assyrian sources provide

us with detailed answers as to how long-distance trade during the Bronze Age might have been organized. However, observations made on the basis of this well-documented case should also be valid – at least in part – for times and places where there is less available evidence.

A number of factors appear to have been decisive to the proper function of the commercial system during the best-documented period of Assyrian trade. These include (1) a network of international agreements regulated by treaty where cities along the routes would levy taxes in return for a guaranteed safety of passage; (2) an infrastructure that allowed the movement of people and goods in great quantity; (3) a surplus capital and workforce; (4) a network of colonies and local agents to handle and sell the goods; and (5) a system of communications, both in terms of the movement of goods and men, functional literacy, and the exchange of written information across space. The two last elements may be characteristic specifically for the fully developed Assyrian trade in Anatolia as representation and written communication were not necessarily essential elements in other parts of the international network. The remaining points, however, seem to be of a more general character and could also apply to the supply chain of the Assyrian trade network. Due to the lack of comparable options, the Old Assyrian example must serve as a basic model for a commercial infrastructure from which one can extrapolate.

When speculating about the possible networks that supplied the market in Assur the magnitude of the trade must again be kept in mind. Simple "down-the-line" patterns of exchange (Renfrew 1975) are not suitable for traffic measured in hundreds or thousands of donkey loads per year. Rather, commerce must have been built on well-established procedures, which in turn required the introduction of predictability and regularity. As is known from later merchant pioneers, the first venture into unknown territory is often a dangerous and risky affair, undertaken in the hope of great gains. If successful, such exploratory missions can lead to a system constructed on the basis of knowledge and experience, established procedures, and well-known sets of contacts. It cannot be assumed that structures of the same density and complexity as those found in the Old Assyrian texts existed across the entire region touched by the international trade. But neither can we assume that there was no clear arrangement and that the commercial links operated in a fog of ignorance and accident.

The establishment of a proper infrastructure would, thus, have been of crucial importance for the operation of the trade, even if this arrangement frequently remains invisible in both the textual and material record. The term "infrastructure" is used here in a broad sense, to include (1) political infrastructure (moderating institutions, state treaties, security, and taxation), (2) industrial infrastructure (for the production of food, tools, saddling, wrappings, breeding of donkeys, wagons, containers, timber, reed, ships, ropes, sails, other equipment), (3) social infrastructure (such as financing, credit, agency, insurance, schooling,

and commercial technology), and (4) physical infrastructure (roads, bridges, mountain passes, guard posts, inns, and a postal system).

Political infrastructure. As mentioned previously, the Assyrian system was based on trading communities of private agents who maintained legal and financial institutions independent from the society in which they settled. The political scene in Anatolia and Northern Syria at this time was one of constant power struggles, warfare, and changing alliances between leagues of cities. The merchants frequently refer to the disruption of trade owing to conflict (Barjamovic, Hertel, and Larsen 2012: ch. 2), and the Assyrians ventured to protect and facilitate their businesses by creating a network of sworn agreements with local rulers. In return for the permission to found colonies with extraterritorial rights, as well as the protection of passing caravans, the traders offered revenues and the right of preemption on their merchandise at favorable prices. Other models for how trade and transport were organized must surely have existed, for example, in the mining areas of Central Asia where there was no state in place (Özyarkent 2012). In areas where fully formed states did exist, the interaction between state institutions and trade appears to have been symbiotic and often a politically creative force.

A recurring feature in the sociopolitical organization of those polities that were specialized in long-distance trade is the dominance of parliamentary institutions controlling political and executive power. In the case of Assur, the oligarchic nature of its political organization has long been linked to the city's commercial specialization (Dercksen 2004; Larsen 1976), but similar institutional frameworks occurred in many other places.

In the realm of state ideology, the restraint on kingship was linked to theology and construed as a division between secular power – in Assur held by the two chambers of the city assembly – and religious power, which was primarily linked to royal performance and cultic ceremony. The particular character of the royal mandate at Assur was reflected in the way the rulers styled themselves as "stewards" (*išiakkum*) of the state deity or "chairman" of the Assembly (*waklum*), but never as "kings" (*šarrum*). A comparable theological fiction seems to be at play in two of the other main trading cities in the south during this period: Dēr – where the rulers generally used the title "viceroy" (*gìr níta*) – and Ešnunna, where the title "steward" (*iššakkum*) was also used (de Boer 2014: 178).

Other cities that specialized in overland trade had republican constitutions. Examples include Emar and Tuttul in Syria (Durand 1990; Fleming 2004) and Sippar in Babylonia (de Boer 2014: 181f.; Veenhof 1999: 612f.), where various forms of collective governance were in place. It is tempting to suggest that some of the same processes that structured social and political power in the medieval cities of Italy, Friesland, and the Hansa, and that allowed them to

raise capital and establish long-distance trading networks, also took place in the politically fragmented landscape of Western Asia during the first two centuries of the second millennium BC (Barjamovic 2012).

The apparent connection between political configuration and trade specialization suggests that state support and regulation was vital for the success of the system. Commerce was stimulated by abolishing taxation on the import of trade goods from the south (Larsen 1976), negotiations with foreign powers and partners (Veenhof 2013), and the operation of a reliable legal system. At the same time, the governing institutions (whose members, it should be emphasized, were for the most part themselves involved in the trade) left the actual running of the business to private enterprise.

Industrial infrastructure. Various industries would have existed to support the trade in Assyria. Only indirect evidence for trade exists in the surviving records, but their existence must be taken for granted on the basis of the extant sources. For instance, the texts from Kültepe show that most of the donkeys used to carry the goods from Assur were sold along with their equipment once the merchandise reached its final destination in Anatolia. With hundreds or even thousands of animals in demand each year, there must have been an extensive industry of donkey breeders and trainers, tanners, rope makers, harness makers, saddle makers, and smiths catering to the traders for whom information is otherwise scarce (Dercksen 2004: app. 3). Similar supporting industries would have existed elsewhere for the production of bitumen, reed, and timber for shipbuilding (Laursen and Steinkeller 2017), or for wheelwrights and cart makers (cf. e.g., Gökçek 2006; Raccidi 2012).

Social infrastructure. The growth of financing and the infrastructure of commercial agency in the Assyrian system have been dealt with extensively in other contexts (Dercksen 1999; Veenhof 1999). At present, it is important to emphasize that the Assyrian trade was organized both as family businesses (Larsen 1999) and as long-term commercial partnerships with outside financing (Larsen 1977; Stratford 2010, 2017). In general, a characteristic element of the Old Assyrian textual record is the high degree of functional literacy that it reflects within the merchant community. It is plain to see why the growth in trade led to the development of a postal service by which caravan leaders, agents, financers, and partners could communicate quickly and efficiently. The routine correspondence among caravans, merchants, and agents took on a new importance, and something called a *bātiqum* could be used to send people, parcels, and money quickly from place to place as a primitive postal system (Veenhof 2008b).

However, literacy (and numeracy) came to penetrate society far beyond the immediate purview of trade, and it also served as a medium of communication

and for the recording of information for women, slaves, and even local Anatolians who were not involved directly in commerce (Michel 2008, 2011). Schooling and education took on new and seemingly wider forms (Barjamovic 2015) and the situation may once again be comparable to the one in late-medieval Italy (cf. Chubb and Kelley 2013), where the developing role of traders in civic life meant that merchants became important catalysts to the growth of education within the urban environment and played a key role in the increased writing of vernacular languages. In a sense, the effect of trade on society was a dialectic process by which forms of social organization and new technologies interacted and changed.

Physical infrastructure. Little is known about the building and upkeep of roads, and, yet, such roads must have been a precondition for some of the large-scale commercial activities reflected in the records (Wilkinson 2014: §1.4). Roads are rarely mentioned because their existence was taken for granted by correspondents, and references only turn up in extraordinary situations when, for instance, a route was closed due to war or weather. The most important indication of their existence is therefore indirect, coming through the constant reference to wagons used in the transport of heavy loads of copper (Barjamovic 2011: §1.5). While a donkey needs only a track when it carries a load on its back, roads are essential in most types of terrain for the commercial use of wagons. The wheels of a fully laden cart break easily, and the vehicle sinks deep into the smallest puddle if it does not travel by a proper road. This makes the use of wagons on longer routes impractical when no real road is available. If such roads exist, however, wheeled traffic is cheaper than donkey back and only marginally slower.

When construction of a new network of roads in Europe commenced in the eleventh century AD, expenses were immense, and the main reason why states chose to spend great sums on developing their infrastructure was the desire to attract wagon traffic. Roads opened up places such as Tuscany and Lombardy to the world, and the term *rivoluzione stradale* has been used to describe the effect these new arteries of traffic had upon trade and society (de Roover 1942, 1963; Spufford 2002).

A well-documented example of organized wagon traffic in antiquity comes from Classical Greece, where carts dominated the overland cargo transport in the Peloponnese in the fifth century BC. As described by Pikoulas (1999, 2007), this choice of transportation was apparently in part due to an intricate system of wagon roads, bridges, drains, resting grounds, guard posts, and even artificial passes that were constructed and operated at great cost by the individual city-states competing for the traffic. Their wish to direct trade for military and economic reasons led to roads being constructed as artificial ruts, either as grooves cut into the bedrock, or laid out as furrows of a standard

gauge in softer ground and paved with gravel. These were "railways in the negative," and had forks, junctions, and turning loops that fixed wagons to their path for control as well as protection. Dominant polities, such as Sparta in the Peloponnese, attempted to control the design of the road system through coercion, and ensured that the main arteries crossing the region passed through their territory. Yet, even small and isolated settlements had at least one road to "plug" their carts into the network, and it seems that it was the ambition of every city to become part of the system.

The Greek case shows how infrastructural networks can arise in a system of peer polities, and it seems feasible to suggest that the comparable rivalry that existed between the Anatolian states of the early Middle Bronze Age could have led to the massive investments in infrastructure that were necessary to create the carriage roads evidenced by the Assyrian wagon trade.

Another key element included in the physical infrastructure were the bridges and ferries crossing the numerous rivers of Anatolia. Bridges are generally the weakest link in a road network, and they cannot be built or efficiently sustained without skilled labor. They were expensive to construct and maintain and could function as gateways for enemies as well as traders. They were an expensive necessity, built to attract traffic by making travel more cost-effective or to open up a new route. It is, therefore, remarkable that references to perhaps a dozen bridges within Anatolia survive in the Old Assyrian records (Barjamovic 2011: §1.5). One can see how a centralized imperial state could finance and organize the construction and upkeep of bridges. However, for the Anatolian microstates, it must have been both an economic and technological challenge to manage such large construction projects. Once again, their presence probably reflects some of the same mechanisms of commercial pressure that drove the infrastructural developments in the Peloponnese and in Medieval Europe: a *rivoluzione stradale*.

Guards and guard posts located at bridges or along roads traveled by the Assyrians are also a recurring topic in the records (Barjamovic 2011: §1.5). Their number and distribution suggests that barracks or forts must have been a common sight in the Anatolian landscape. Their primary function was presumably to patrol the countryside, apprehending smugglers and protecting traders and travelers from misfortune. It may also be that the garrisons were responsible for keeping a designated stretch of a road or mountain pass clear and in good repair.

Finally, when passing through distant regions with heavy cargos, the Assyrian caravans depended upon inns laid out along the main routes of Anatolia and Syria for provisions (Barjamovic 2011: §1.7). The Assyrian caravans did not carry their own food for the five- to six-week trek; therefore, as in all later periods, the caravan leader had to trust that the inns en route could provide the water, fodder, and food that his group required. Inns were key points along the

trade routes: Most of the traffic would have passed them, and they were vital to the way in which people and goods could move. Some are known to have offered stabling facilities and long-term storage. One could buy livestock there or take on guides and packers. Inns were essential not only for offering protection, provisions, and a bed, but also for providing the necessary preconditions for larger caravans to travel at an acceptable speed.

A caravan consisting of 500 donkeys and a comparable number of men would obviously have required precise organization: The animals alone would consume around 8 tons of water per day, and the challenge of feeding them would have required that detailed agreements were made beforehand with providers along the route. It is difficult to determine exactly how common inns were, but it is interesting to note that even small and rarely mentioned settlements in Anatolia and Northern Mesopotamia had them (Barjamovic 2011: ch. 1). This implies that a constant and lively traffic was the rule rather than the exception, and it shows that the inns must have depended on traffic other that the occasional Assyrian merchant.

Services provided by inns were paid for in cash metal, and the flow of traders spending part of their proceeds en route through Syria and Anatolia would have transformed the economy of the region affected by the traffic. Each donkey would eat some 3 kg of high-quality fodder each day, and in Northern Syria, where hundreds of Assyrians and their donkeys passed each year, the food consumption of an inn catering to the large caravans would have equaled that of a village. Its presence must have had notable consequences for local agricultural production and distribution. Manufacture had to be restructured to accommodate consumption as well, and the inns would have tied down part of the available local work force (on a seasonal basis at least) with a lasting effect on the economy of the roadside communities.

The magnitude of the infrastructure necessary to support the volume of traffic recorded in the Old Assyrian evidence, and the fact that the function of the Assyrian commercial network required the presence of several comparable and interlocking commercial circuits, gives rise to further questions. Can we account for the Assyrian evidence in other ways? Could the roads, guards, and bridges attested in the Assyrian records have been built solely for their benefit? Who traded in goods that are absent from the Assyrian records? Who traded in the areas that were off limits to the Assyrians? How did goods reach the market in Assur? And where did they go once they left Assyrian hands?

Simple analogy shows that the world was interconnected. Thus far, the Old Assyrian records stand virtually alone as evidence for the organization of overland trade in the Bronze Age. They should therefore be considered fundamental for providing us with a detailed understanding of commercial procedures and

the practical, daily activities necessary for the system to function. They underline the importance of organizing infrastructure and managing the relations between a range of dissimilar polities and institutions. In addition, they lend a surprising insight into the quantities of goods moved over great distances. All these features have to be integrated into an analysis of the networks of exchange that linked the ancient world.

Sources roughly contemporary with the Assyrian merchant archives show that, for instance, people living in the city of Mari in Eastern Syria juggled effortlessly with a cognitive map reaching from Egypt to the Persian Gulf and from Cyprus to Central Iran (Larsen 2008). A ruler of this period could receive embassies and gifts from as far away as Central Asia, and royalty in Anatolia were familiar with products from Sub-Saharan Africa (Aruz, Benzel, and Evans 2008).

The fact that the bronzes found on the coast of the Sea of Marmara contain tin from sources in eastern Kazakhstan only comes as a surprise when knowledge of the great volume of metal traded by the Assyrians is compared with the apparent production capacity and social integration of the areas and societies where the tin was mined. The discovery of both Andronovo and Margiana pottery at the great extraction sites of Central Asia (Alimov et al. 1998; Parzinger and Boroffka 2002, 2003) suggests that the interface between mobile pastoralists and urban groups played a key role in the early extraction and distribution of tin. Studies of social organization and resource extraction are still in their infancy for Central Asia in the Middle Bronze Age (Özyarkent 2012; Stöllner 2012), but the comparable case of copper extraction in Oman demonstrates how substantial and complex mining operations could be organized in nonstate societies (Rouse and Weeks 2011).

Joint investigations of the archaeo-metallurgical group in Freiburg, the Mining Museum in Bochum, and the institutes of archaeology in Uzbekistan and Tajikistan have revealed two important tin deposits in the Zeravshan Valley. The pottery found near the mines of Karnab, Lapas, Changalli, and Mushiston, as well as a series of radiocarbon samples collected at the sites, date as far back as the nineteenth century BC. Parzinger and Boroffka (2003) and Cierny (2002) propose that both the settlements, the mines, and the smelting workshops investigated in the Kyzylkums (that are also assigned to the Andronovo complex) cannot only have catered to a local market, but must have exported metal to cities in Iran and Mesopotamia. The eastward expansion of the Andronovo culture (ca. 2500–1600 BC) has recently been linked to the search of metals (Stöllner et al. 2011). Thus, the flourishing of the Bactria-Margiana Archaeological complex (ca. 2300–1700 BC) and its intensifying contacts with the Andronovo/Tazabag'yad located north and east from 2000 BC should perhaps be connected to the long-distance trade in raw materials (Kohl 2007).

To conclude, there were surely more than one source and more than a single route leading from extraction areas to the centers of distribution and consumption. Definite signs of the infrastructure that would have facilitated the exchange remain almost entirely invisible east of Susa and south of Bahrain, but the great volume of tin handled by the Assyrian merchants proves that substantial activity in resource extraction and trade must have taken place on the very fringes of the urban world and over a vast area.

The closest ancient cognate to the Old Assyrian commercial circuit is probably the later Phoenician trading system (cf. Monroe, this volume), which shares a number of structural similarities, despite the fact that it relates to a maritime exchange where risk and profit were much greater. "Heterarchy" and "middle ground" rather than "hierarchy" and "cores" are dominant in both cases. The formation of both networks was unrelated to outside or imperial pressure (Monroe, this volume), and both systems seem to have risen in a political climate of decentralization and peer-polity interaction, although the Phoenician cities surely prospered from their privileged access to the imperial markets (Radner 2004). Finally, in both cases, a gradual expansion and rise of the political and physical infrastructure needed to accommodate trade is evident.

By contrast, there is no evidence to support any dichotomy between Iron Age entrepreneurialism and Bronze Age "command economics" (Sherratt 2003). The Old Assyrian system of colonies and free agents left a direct and crucial role for the state and its institutions, but there was no attempt by the state to control the trade directly. The colonial network had no primary locus of capital accumulation, and it was not based on an unequal exchange of manufactured products for raw materials from an impoverished periphery. Assyrians supplied the Anatolians with textiles for silver, but they held no economic advantage over them and were tolerated by their hosts at their peril.

As pointed out in studies of both the Phoenician cities and later medieval Italy, traders were often socially and, to some extent, politically marginalized in relation to society around them. The clash of "old" and "new money" seems to be a driving force in history (Barjamovic 2012). By contrast, in the case of Kaneš, there was no significant physical or even social segregation of the merchant community. The Assyrian merchants lived in a quarter that was not physically demarcated, and locals and foreigners lived side by side (Hertel 2014). Mixed marriages were common, and arts and technologies were exchanged along with words, genes, and social institutions. The Assyrians retained a judicial system within their own community, and were free of local taxation and corvée, but there is nothing to suggest that they were in any sense socially stigmatized.

More than anything, the Assyrian evidence raises the important question of "representativity." As has been mentioned, the fact that the source material

remains virtually unique for the Bronze Age world has led to it being relegated to a status of "anomaly." However, the interdependency of the Assyrian system upon other, similarly functioning, if perhaps differently organized, networks, precludes this assumption.

This extrapolation provides an important lesson in what type of activities could take place "under the radar" of the usual sources, which mostly come from centralized institutional contexts. The material from Kanesh is unique only due to the fact that it survived. When ancient states appear to have been narrowly focused on the mobilization of resources and administration of labor – because this is all that survives in their paper trail or junkyard – the Old Assyrian example acts as a reminder that even very voluminous and geographically widespread trading activities can remain virtually invisible both in the textual and in the material record. Had it not been for an inauspicious conflagration in Kanesh around 1850 BC that sealed the evidence, this chapter could not have been written.

A task for the future is to study the way in which trade was organized within decentralized political systems, based on local circuits of geographical monopoly and political protectionism as compared to larger state formations. We should ask whether and how trade and transport in a system of peer polities were managed differently from the practices found between and within extensive tributary empires. In addition, a general study of the ability and propensity of early imperial states to acquire and manage resources through trade is required (Bang 2008). The question remains whether a dynamic relationship exists between the position of merchants in society and the rising strength of the state and to what extent trade lies at the core of state formation.

The fact that the Old Assyrian records stand virtually alone means that they are fundamental to the identification of the detailed commercial procedures, and the practical, daily activities necessary for ancient trade systems to function. They underline the importance of organizing infrastructure and relations among a range of dissimilar political systems and institutions, and, not least, they lend a surprising insight into the quantities of goods moved over great distances. All of these features have to be integrated into an analysis of the wider connections that linked the Old Assyrian circuit with distant regions, as well as the study of ancient trade more generally.

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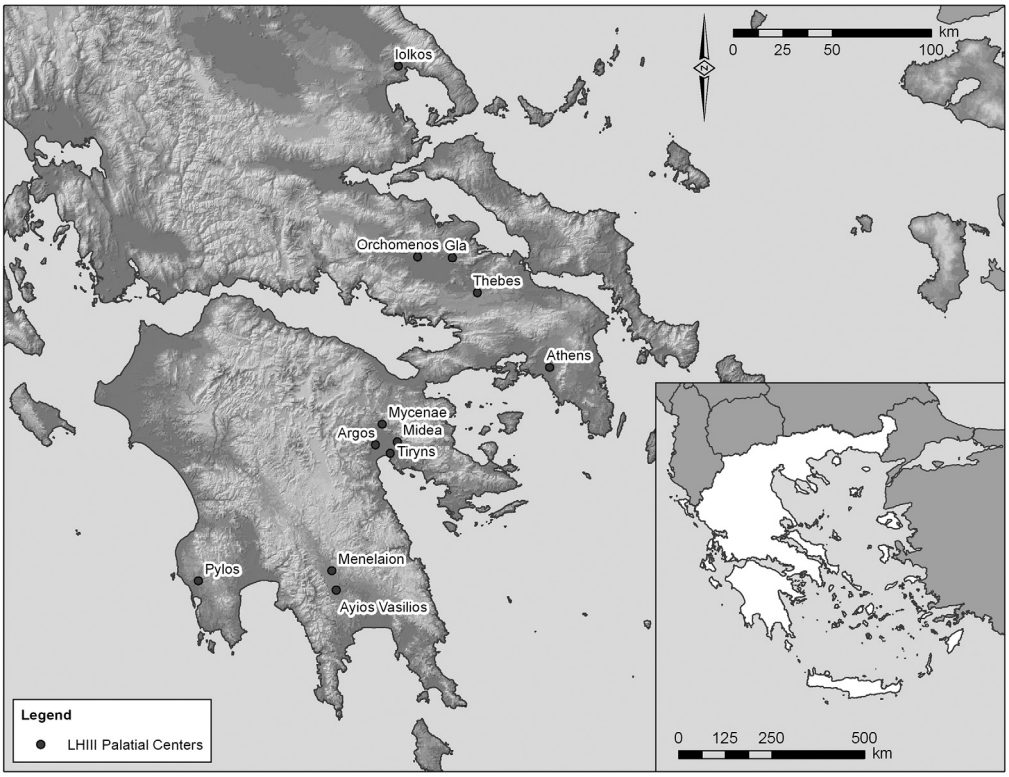
SIX

MYCENAEAN GLOCALISM: GREEK POLITICAL ECONOMIES AND INTERNATIONAL TRADE

Michael L. Galaty

In this chapter, I demonstrate that patterns of international trade, whether prehistoric or historic, can only be understood at multiple scales, running from the local to the global (cf. Parkinson and Galaty 2009). I apply the term "glocal" to those decision-making processes that operated microregionally and over the short term but were linked to, and therefore affected and were affected by, pan-regional systems of geopolitical and economic interaction. My primary assertion is that, while all politics are indeed local (Schon 2009), the degree to which individual and state agents acknowledged and sought to balance local and global strategic concerns varied in response to systems of political economy. Political economies likewise varied from state to state; they were structured and functioned differently and were products of different regional historical trajectories.

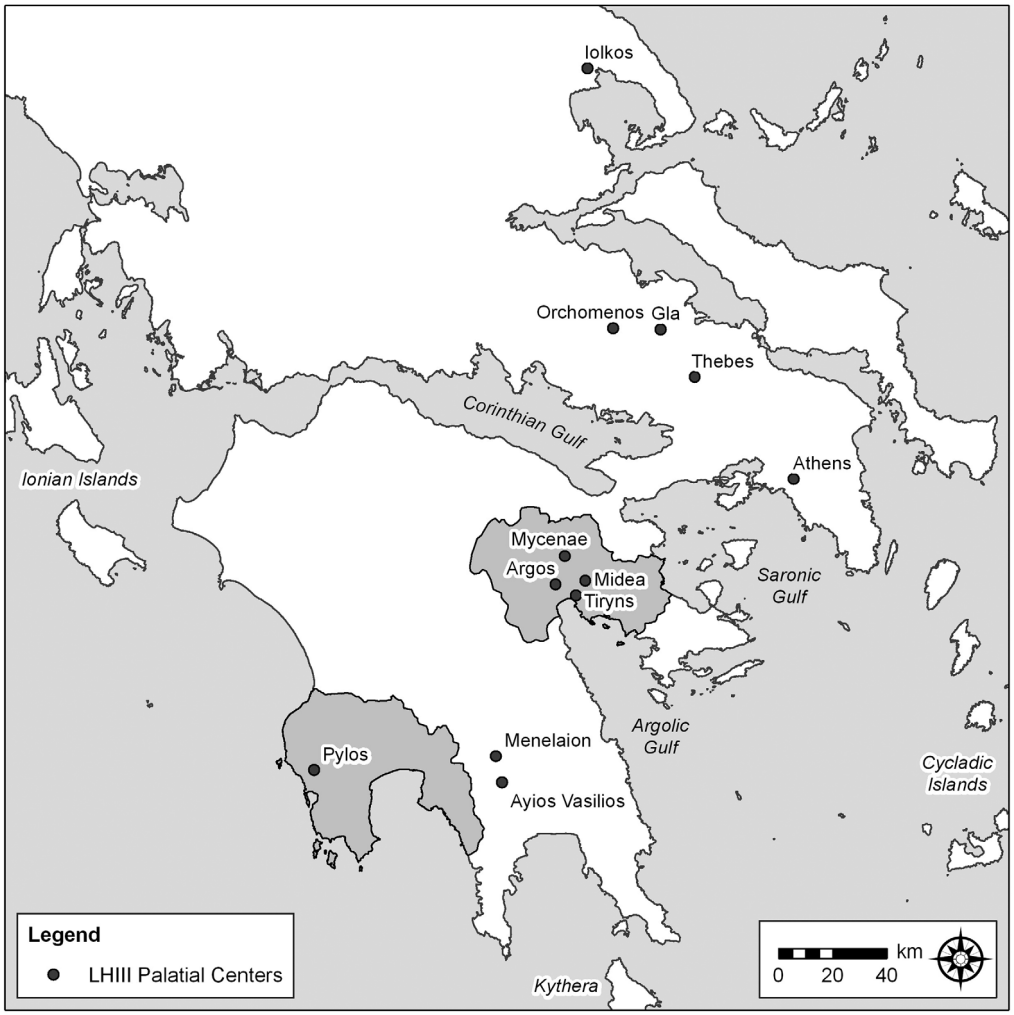
Considering local, agentive needs and wants is thus vitally important when addressing world-systemic processes, like international trade, as has been generally recognized in recent years by world-systems analysts (see review in Galaty 2011; see also Hall et al. 2011). At the same time and as a result, notions of dependency that were central to world-systems theory as originally formulated have been rethought, transcending the core-periphery dichotomy and opening up ample space for much more complicated world-systemic relationships (see, e.g., Hall's [2001] models of complex incorporation). Kardulias (2007) has suggested, for instance, using the North American and Cypriot frontiers as examples, that peripheral societies often set the conditions for their own incorporation into



6.1. Map of Greece showing the main sites and regions discussed in the text. Rebecca Seifried, University of Illinois, Chicago.

larger states and empires, a process he calls "negotiated peripherality," which privilege local agency, while situating agentive behaviors within larger global frameworks (e.g., Galaty et al. 2013).

With the preceding in mind, the Late Bronze Age Mycenaean *koine* (ca. 1650–1200 BC) is used as a case study for addressing "glocal" behaviors in prehistoric contexts (Figures 6.1 and 6.2; Table 6.1). Different Mycenaean states, namely Mycenae and Pylos, experienced different degrees of integration into the Eastern Mediterranean Bronze Age world system: (1) because they were quite different in terms of geography and history, but also, and more importantly, (2) because individuals in those states, elite and nonelite alike, operated within very different political-economic systems. Glocal concerns were different in Mycenae than they were in Pylos because local political-economic conditions were different. These conclusions seem like simple, straightforward ones, and to some extent they are, but Mycenaean Greece has traditionally been depicted as a single, unified economic and sociopolitical entity (e.g., Eder and Jung 2015; Kelder 2010) when in reality it was not. Differences between Mycenaean states are typically ignored or elided and local agentive behaviors homogenized, subsumed by the hegemonic activities of palatial authorities,



6.2. Study region boundaries, the Argolid and Messenia, showing known and probable palatial centers. Rebecca Seifried, University of Illinois, Chicago.

as recorded in Linear B. This approach to the Mycenaean states specifically, and to ancient states in general, no longer works (cf. Galaty, Nakassis, and Parkinson 2011; Nakassis, Galaty, and Parkinson 2016; Parkinson, Nakassis, and Galaty 2013). This chapter and this book may therefore serve as a corrective.

In fact, comparative analysis indicates much intra- and interregional variation within and between the Mycenaean states, which were, contrary to assertions otherwise, quite different from one another. This variation stems from multiple sources and conditioned how Mycenaean people and institutions interacted with people and institutions in nearby peripheral and marginal zones, such as those in Italy and up the eastern Adriatic coast. My analysis indicates that Mycenae and Pylos filled very different roles in the Late Bronze

TABLE 6.1 *Chronology of Greece and the Adriatic*

	Crete[a]	Mainland Greece[a]
	Minoan	Helladic
Late Bronze III	1390–1070 BC (Mycenaean)	1390–1070 BC (developed palaces)
Late Bronze I-II	1600–1390 BC (Neopalatial)	1600–1390 BC
Middle	2100–1600 BC (Protopalatial)	2000–1600 BC
Early	3100–2100 BC (Prepalatial)	3100–2000 BC
Neolithic	ca. 6800–3100 BC	ca. 7000–3100 BC
	Eastern Adriatic and Western Balkans[b]	
Late Bronze Age	ca. 1300–700 BC	
Middle Bronze Age	ca. 1600–1300 BC	
Early Bronze Age	ca. 2400/2200–1600 BC	
Chalcolithic	ca. 3500–2400/2200 BC	

[a] Tartaron 2008
[b] Dimitrijević, Težak-Gregl, and Majnarić-Pandžić 1998

Age Mediterranean world system not only because they experienced different geographies and histories, but more precisely because those geographies and histories engendered radically different political economies. Moreover, because the inhabitants of the Pylian state possessed glocal concerns that were oriented west more often than east (Galaty, Tomas, and Parkinson 2014), they probably did not serve as nodes in exchange systems that, according to Kristiansen and Larsson (2005), connected the Near East to continental Europe; rather, those connections were forged by Mycenae and likely took a more northerly route.

SOURCES OF VARIATION

Geography

The whole of Greece is often characterized as mountainous and difficult to traverse, but equally accessible by sea from all directions, and relatively dry, but similarly affected by a predictable Mediterranean weather pattern. These blanket characterizations mask much regional variation in topography and climate, however. There are marked geographical differences across Greece, between north and south for example, that would have strongly affected economic activities and organization, as well as lines of communication and cultural interaction. Likewise, Greece is often depicted as being resource poor, which may be true in relative terms, but again, masks differences. Different Mycenaean states had different kinds of raw materials at their disposal. Furthermore, different regions possessed, in varying amounts and degrees of quality, access to various basic resources, such as soil and water. Thus, what was produced and traded, and whether and how regional resources were

controlled by Mycenaean elites, varied from state to state, in part as a function of geographical differences. These differences affected processes of state formation in Greece, beginning as early as the Early Bronze Age (ca. 3100 BC), if not earlier.

History

Different Mycenaean states followed different paths to complexity and experienced different developmental histories. While Mycenaean states shared common roots in the preceding Middle and early Late Bronze Age (Voutsaki 2010; Wright 1995), and Mycenaean people shared a common Greek language and perhaps "ethnicity" (Davis and Bennet 1999), there is also evidence for increasing heterogeneity and regionalization over time (Wright 2004). Mycenaean individuals living in different Mycenaean states accessed very different landscapes, but also pursued different social goals, in different social arenas. There were, for example, differences in ritual and burial practice from one Mycenaean state to another (Voutsaki 1998). Variation in social behavior is also linked to differences in patterns of consumption, for example of prestige goods, including trade goods (Schon 2009). Differences in regional developmental trajectories – and in social organization – are thus, to some degree, the direct result of different Mycenaean people living in different Mycenaean states emphasizing different ways of interacting with each other and with the wider Mediterranean world system.

Boundaries

It is now clear that the boundaries that separated Mycenaean polities from their nearest neighbors, in the Balkans and Cycladic Islands for instance, were real, but permeable. They were zones of cultural interaction and transfer, similar to modern frontiers (Feuer 2011). And yet, different Mycenaean states clearly preferred different international trade partners and experienced shifting levels of interaction intensity through time (Cline 2007). Boundaries opened and closed in response to numerous internal and external factors. Changes occurring at one end of the Mediterranean interaction sphere might precipitate changes at the other end. Archaeologically identifiable shifts in Mycenaean trade may signal developments in the wider Bronze Age Mediterranean world system, to which Mycenaean people and institutions responded.

For example, the amount and nature of trade between the Aegean and Egypt changed from one dynasty to another and during the intermediate periods (Galaty et al. 2009). During phases of Egyptian political and economic decentralization, trade with the Aegean, though less formalized, may have increased,

and Egyptian trade goods may have become more widely available, not less, thereby altering local systems of political economy. Likewise, at the close of the Mycenaean age, when access to eastern sources of bronze diminished, contacts between sub-Mycenaean peoples and their Adriatic neighbors increased, as individuals searched for alternate sources of metal ore.

Agency

While variable geography, historical inertia, and shifting boundaries all had roles to play in determining Mycenaean sociopolitical organization and trade contacts, decisions made by local actors were equally, if not more, important. We can describe this decision-making process as "glocal" (Maran 2011): Personal choices made by individuals at all levels of society shaped processes of Mycenaean interaction with the external world. And because the "palatial" period – the Late Helladic IIIB (ca. 1300–1200 BC) – spanned only a few generations at most, intergenerational and short-term intragenerational behaviors strongly conditioned the strength of and reasons for international trade. Consequently, to understand the roles played by long-distance trade in Mycenaean society, and in any society, the goals of local agents must also be understood. This endeavor is, of course, made easier through access to the Mycenaean Linear B records, bearing in mind, though, that the majority of these were found at a single Mycenaean center, that of Pylos.

MYCENAEAN STATES COMPARED

The geography of Greece appears to have influenced where and how the various Mycenaean states formed. Despite complex proto-urban polities on several Aegean islands – for example, on Akrotiri, Melos, and Kea – palatial states did not form there. It may be that the Greek islands were too small or dry to support the kinds of networked, territorial behaviors, based on systems of direct taxation, which characterized Mycenaean states. Additionally, it is equally possible, in fact likely, that island cultural values mitigated against overly hierarchical social systems and institutions. States did form on Crete, a much larger island, but the corporate, Minoan peer polities appeared earlier and were quite unlike the Mycenaean states. They also had earlier, more direct contact with the Near Eastern and Egyptian core states. Even after the Mycenaean conquest of Knossos and the destruction of all other palaces, Minoans maintained a distinct language, culture, and ethnic identity (Driessen and Langohr 2007). With the exception of Mycenaean Knossos, Mycenaean states are found only in southeast Greece, south of a line drawn between Thessaly and Messenia. The differences between north and south Greece – the so-called north-south

divide – were first investigated by Halstead (1994) with reference to the Neolithic. In north Greece, where there was more rainfall, long-lived "tell" settlements formed, based on arable agriculture. In south Greece, relatively short-lived flat and cave settlements formed, based on dry farming and pastoralism. Renfrew's (1972) "Mediterranean triad" is a southern Greek phenomenon. These differences persisted into the Bronze Age and may help explain why Mycenaean states formed where they did: in the south, counterintuitively. The risks associated with farming in southern Greece led Halstead and O'Shea (1982) to propose a "social storage" model for the rise of states there, and not elsewhere, in Europe.

While climate helps explain Mycenaean settlement patterns, it seems likely that secondary processes of contact also influenced state formation and organization (Parkinson and Galaty 2007). The Mycenaean states form a parabolic arc that collected and reflected first Minoan and later Eastern Mediterranean influences. Their orientation was directed to the southeast, toward Crete and the Eastern Mediterranean. This is no accident. Each Mycenaean state was positioned to control trade moving south to north, at first with Crete as an intermediary, and later through direct interaction with other Mediterranean powers ("brother to brother" as it were). The Argolid states controlled overland access from the Argolic and Saronic gulfs to the Corinthian gulf. Pylos in Messenia controlled trade moving from the Aegean to the Adriatic. Again, however, while geography matters, local social concerns operating in each Mycenaean state over time also influenced the impetus for and nature of international trade contacts. For example, by the Late Helladic III, Mycenaean-style pottery is found at sites throughout the Eastern Mediterranean, sometimes in large numbers, but chemical characterization indicates that it is almost exclusively from the Argolid, probably made at Mycenae (most recently, Tomlinson 2013). On the contrary, pottery from Pylos is never (or very rarely) found outside of Messenia. Likewise, Mycenae's perfume was produced for an international market, while Messenia's perfume was consumed locally, used primarily in religious contexts (Bendall 2007). Thus, whereas the Argolid states, Mycenae in particular, were plugged directly into Eastern Mediterranean markets, Messenia appears to have been out of the loop and inward looking, or invested in different loops elsewhere.

While foreign imports to any of the Mycenaean states never occurred in very large quantities, particularly when converted from absolute numbers into "contacts" (Parkinson 2010), Mycenae clearly took the lion's share during LH IIIA-B (beginning ca. 1415 BC). However, contrary to popular belief, evidence for international trade with Greece *increases* slightly following the collapse, though it is no longer channeled through the Mycenaean states. The vast majority of foreign goods are found in sub-Mycenaean graves. Unlike the Argolid, where settlement occupation continues into the Iron Age, Pylos was

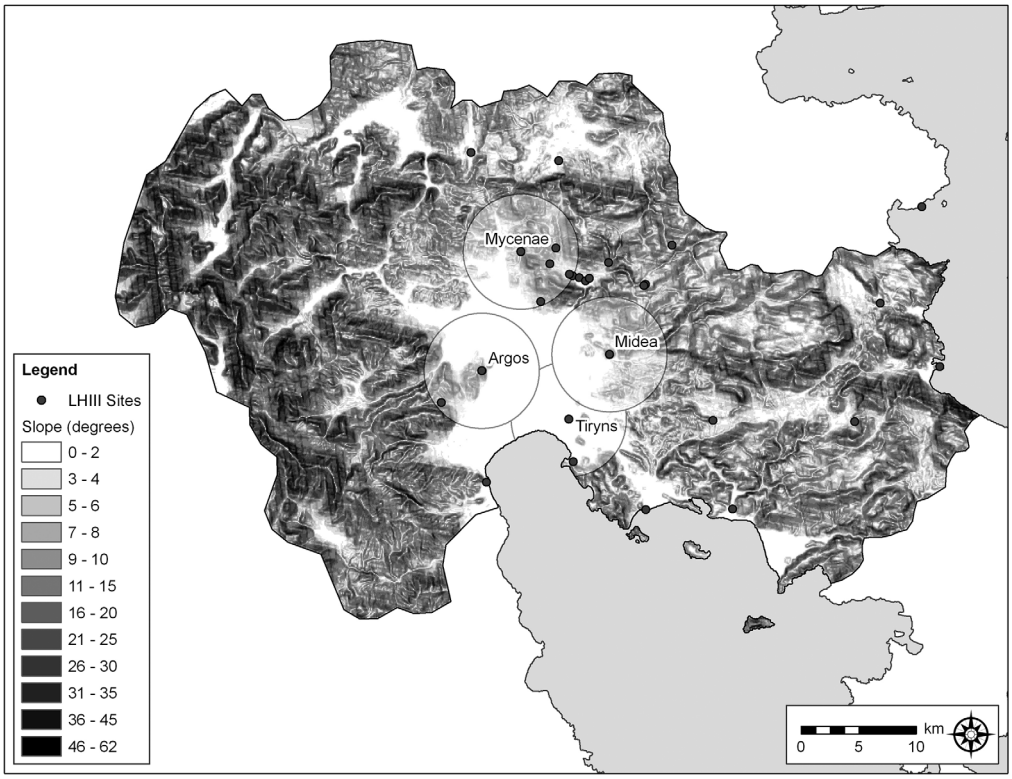
almost completely abandoned after the collapse. There are geographic reasons for the variable effects of the collapse, but more meaningfully, differences in local systems of political economy determined not only how the different Mycenaean states engaged the wider world system, but also what happened to them when that system destabilized. This approach has profound implications for our understanding of the European Bronze Age and the timing and direction of the spread of state-level institutions into Europe, as described by Kristiansen and Larsson (2005).

The Argolid and Messenia

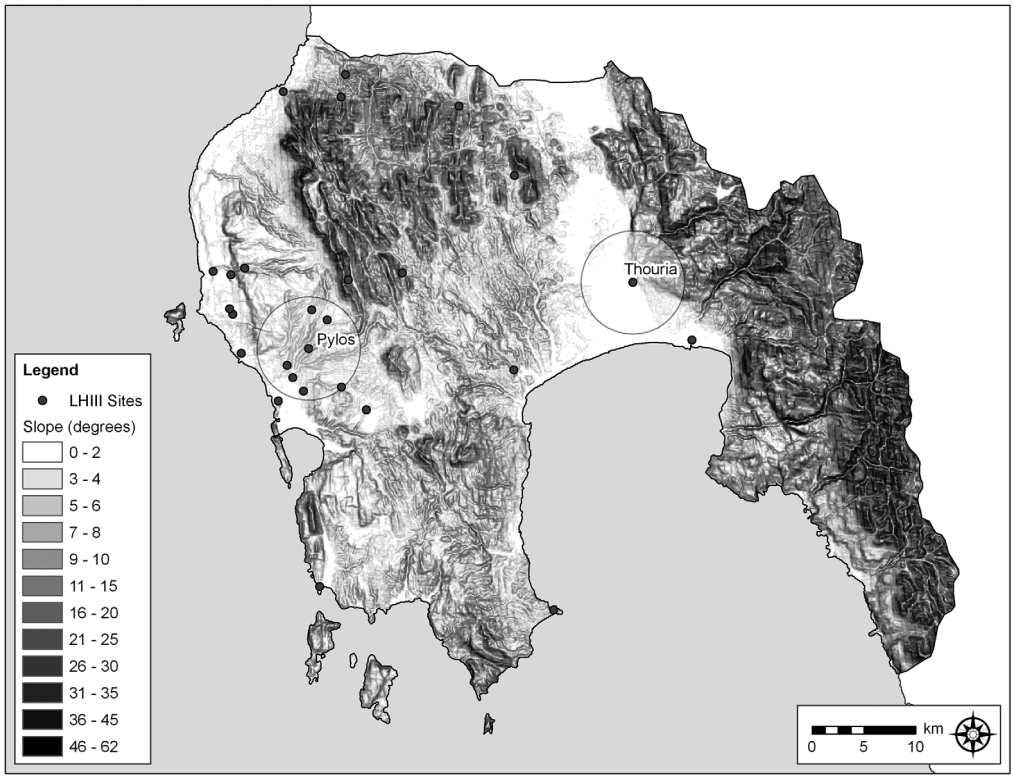
While all the Mycenaean regions differed, one from the other, to some degree, this is particularly true of the Argolid and Messenia, the two regions about which the most is known (Figure 6.1).[1] For example, during the Late Helladic IIIB the Argolid supported several primary centers – Mycenae, Tiryns, and Midea at least – while Messenia supported only one – Pylos. As described previously, the Argolid tapped into widespread Mediterranean trade routes, while Messenia did not. The marked differences between the Argolid and Messenia have their basis in geography, but also result from differences in political-economic trajectory and organization.

Slope

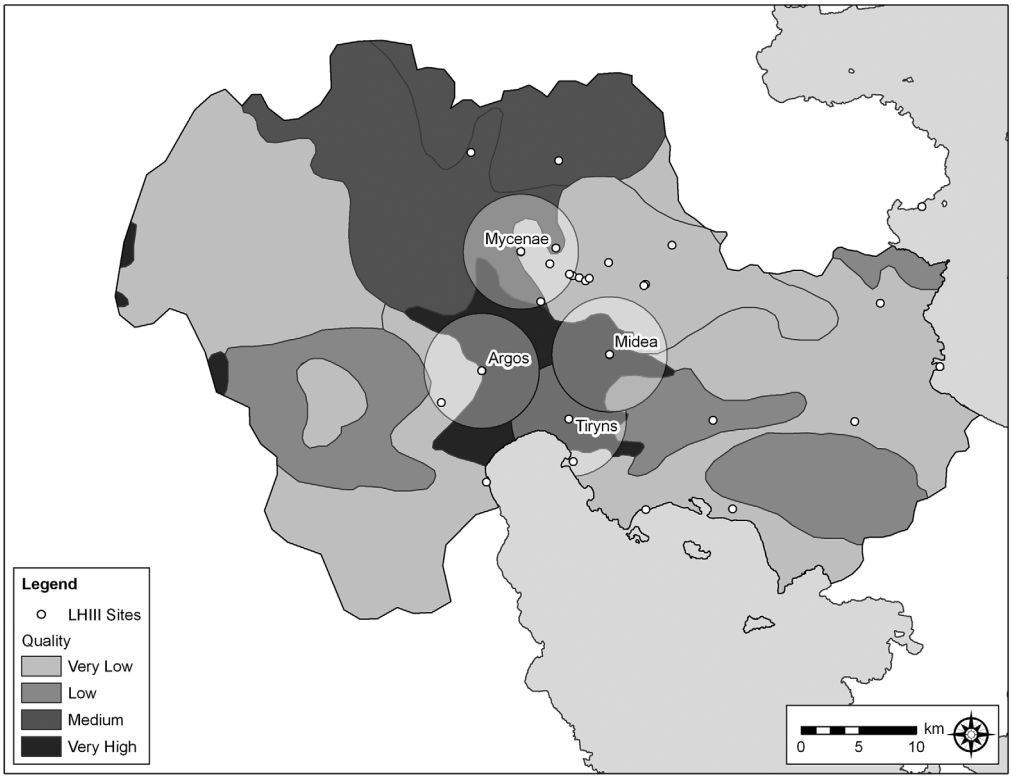
Whereas the mean slope in both regions is similar – 12.25 percent in the Argolid versus 11.28 percent in Messenia – the Argolid is dominated by a single expanse of flat land, the Argive plain (Figures 6.3 and 6.4).[2] The slope curve for Messenia is smoother; areas of flat land are more widely distributed. But, like the Argolid, a single plain, drained by the Pamisos River, still encompasses much of the flattest land, and it is located in the Further Province, on the other side of the Aegalion range from Pylos. When slope is calculated for each settlement within 5-km radius circular catchments, it is clear that many of the largest, most important Argive sites – with the meaningful exception of Mycenae – had access to large tracts of flat land. In contrast, the largest, most important sites in Messenia, including Pylos, had access to much less flat land. The key exception is Thouria, in the Further Province. Its catchment encompassed 26 percent more land under a 4 percent slope than did Pylos, and Pylos's catchment overlapped with that of many different, competing settlements. These data help to explain why, having incorporated the Hither Province's secondary centers, Pylos had to expand into the Further Province. At the most basic level, the landscape of the Argolid is very different from that of Messenia, as is its geography. These differences strongly conditioned the shape and configuration of the political economies that developed in both regions by 1300 BC.



6.3. Slope analysis for the Argolid, showing 5-km radius catchments for Mycenae, Tiryns, Midea, and Argos. Rebecca Seifried, University of Illinois, Chicago.



6.4. Slope analysis for Messenia, showing 5-km radius catchments for Pylos and Thouria. Rebecca Seifried, University of Illinois, Chicago.

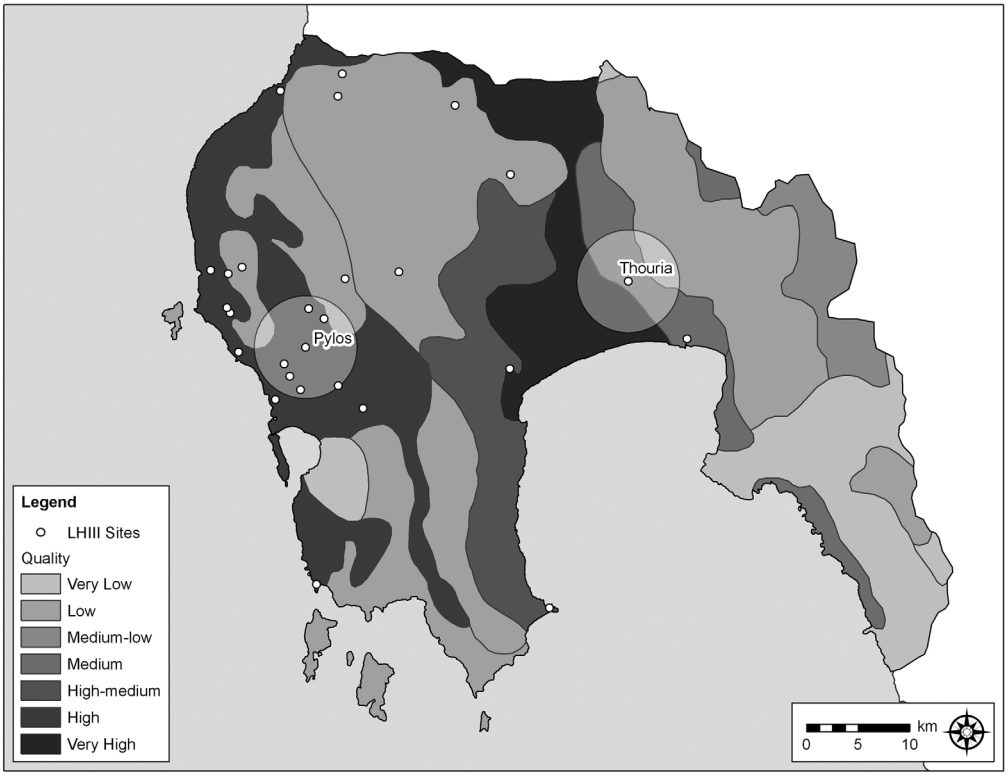


6.5. Soil classes, Argolid, showing 5-km radius catchments for Mycenae, Tiryns, Midea, and Argos. Rebecca Seifried, University of Illinois, Chicago.

Soil

Because flat land is not necessarily comprised of the best soils, Mycenaean capital availability can be operationalized by testing access to agriculturally productive soils, using the land classes developed and mapped by Yassoglou (2004). In the Argolid, the primary centers had access to large tracts of good soils, particularly calcaric fluvisols, which are of the very highest agricultural quality (Figure 6.5). In contrast, Messenia possesses few soils of the very highest quality, and most of these are in the Further Province (Figure 6.6). When it comes to the Argolid, once again Mycenae is exceptional compared to other centers; it had access to far less good soil (Table 6.2). In Messenia, Pylos had no highest quality soil within its catchment, and it would have had some difficulty raising the staple surpluses needed to underwrite its economy. Because of this, an expansion into the Further Province seems logical, if not inevitable.

Given the distribution of slope and good soils in both regions, we might expect that people would have settled near the best land. However, a nearest neighbor analysis indicated no statistically significant degree of settlement clustering. Centrifugal forces other than access to good land appear to have pulled the settlement system apart in both the Argolid and Messenia, as Mycenae and



6.6. Soil classes, Messenia, showing 5-km radius catchments for Pylos and Thouria. Rebecca Seifried, University of Illinois, Chicago.

Pylos demonstrate. These forces were social, and political economic, but were structured differently in both regions, and were variously affected by differences in how Mycenae and Pylos accessed the Mediterranean world system.

Travel Times

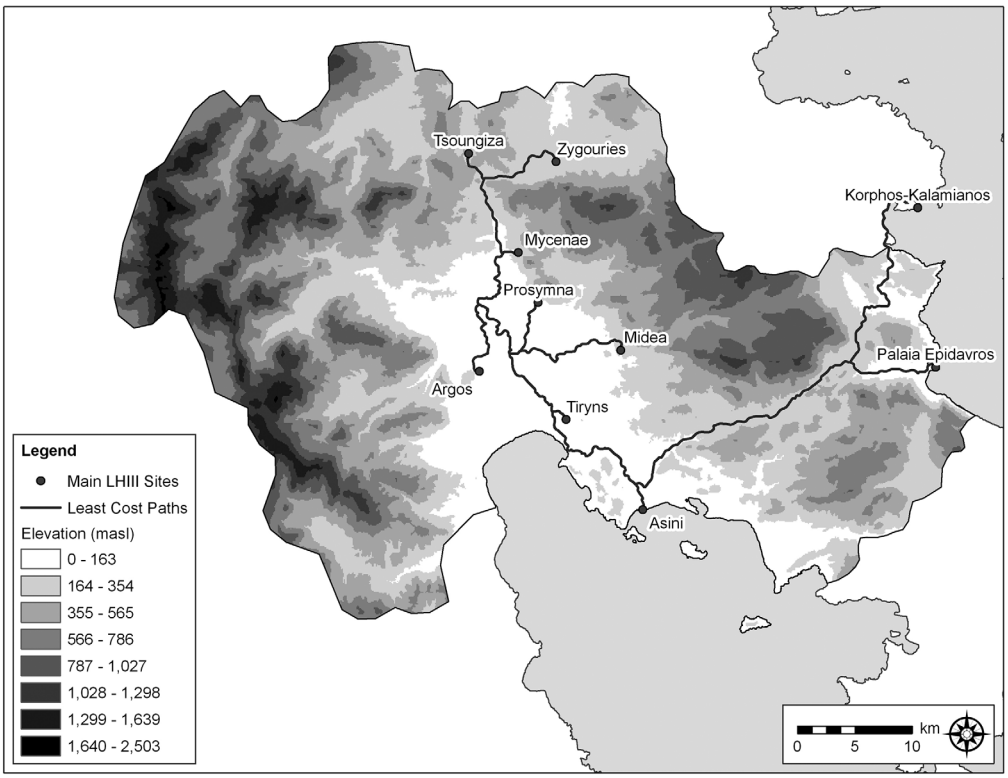
To compare the structure of Mycenaean intra- and interregional interaction spheres, and their integration into wider Mediterranean systems, the distance and travel times – both over land and by sea – between the various palatial centers and between each palatial center and Crete were calculated using Google Earth (Table 6.3). The data, while necessarily rough, are nevertheless highly informative. Predictably, the most distant palatial center, and the least central, is Iolkos in Thessaly. The next least connected center is Pylos. As it turns out, Mycenae is the most connected, which may help to explain its particular location in the Argolid region, far from the nearest port yet midway between the Argolic, Saronic, and Corinthian gulfs. When sailing distances and times are calculated, however, these differences largely disappear, although the Argive sites were slightly closer by sea to both Chania and Knossos on Crete.[3] Mycenae had more direct access to Crete and to Eastern Mediterranean trade

TABLE 6.2 *Soil Classes by Catchment for Mycenae, Tiryns, Midea, Argos, Pylos, and Thouria*

Name	Percent	Soil Type	Quality	Desertification	Uses
Mycenae	32.92	Calcaric Leptosol	Very low	Very high	Wild nature
Mycenae	11.46	Calcaric Fluvisol	Very high	Low	Agriculture
Mycenae	55.62	Vertic-Calcic Fluvisol	Medium	Medium	Forest, controlled pasture
Midea	1.40	Calceric Leptosol	Very low	Very high	Wild nature
Midea	25.16	Calcaric Leptosol	Very low	Very high	Wild nature
Midea	13.45	Eutric Leptosol	Low	High	Forest, controlled pasture
Midea	60.00	Calcaric Fluvisol	Very high	Low	Agriculture
Tiryns	10.03	Calceric Leptosol	Very low	Very high	Wild nature
Tiryns	6.74	Eutric Leptosol	Low	High	Forest, controlled pasture
Tiryns	83.23	Calcaric Fluvisol	Very high	Low	Agriculture
Argos	31.47	Calceric Leptosol	Very low	Very high	Wild nature
Argos	0.88	Calcaric Leptosol	Low	Very high	Forest, controlled pasture
Argos	67.65	Calcaric Fluvisol	Very high	Low	Agriculture
Ano Englianos	13.72	Eutric Regosol	Low	High	Forest, controlled pasture
Ano Englianos	86.28	Calcaric Cambisol	High	Medium	Forest, controlled pasture and agriculture
Thouria	18.01	Calcaric Leptosol	Low	Very high	Forest, controlled pasture
Thouria	44.11	Calcaric Regosol	Medium	Medium	Forest, controlled pasture and agriculture
Thouria	37.88	Calcaric Fluvisol	Very high	Low	Agriculture

TABLE 6.3 *Travel Times in Days over Land and by Sea from Each Palatial Center to Every Other Palatial Center*

Site Name	Walking	Port Name	Sailing
Pylos	7.74	Pylos	2.91
Thebes	5.18	Aliki	4.38
Orchomenos	6.11	Antikyra	4.21
Gla	6.42	Gytheio	2.55
Menelaion	6.04	Nafplio	2.85
Ayios Vasilios	6.26	Korphos-Kalamianos	2.85
Mycenae	4.29	Piraeus	2.68
Tiryns	4.59	Mitrou	4.15
Argos	4.47	Volos	3.96
Midea	4.50		
Athens	5.34		
Iolkos	11.51		

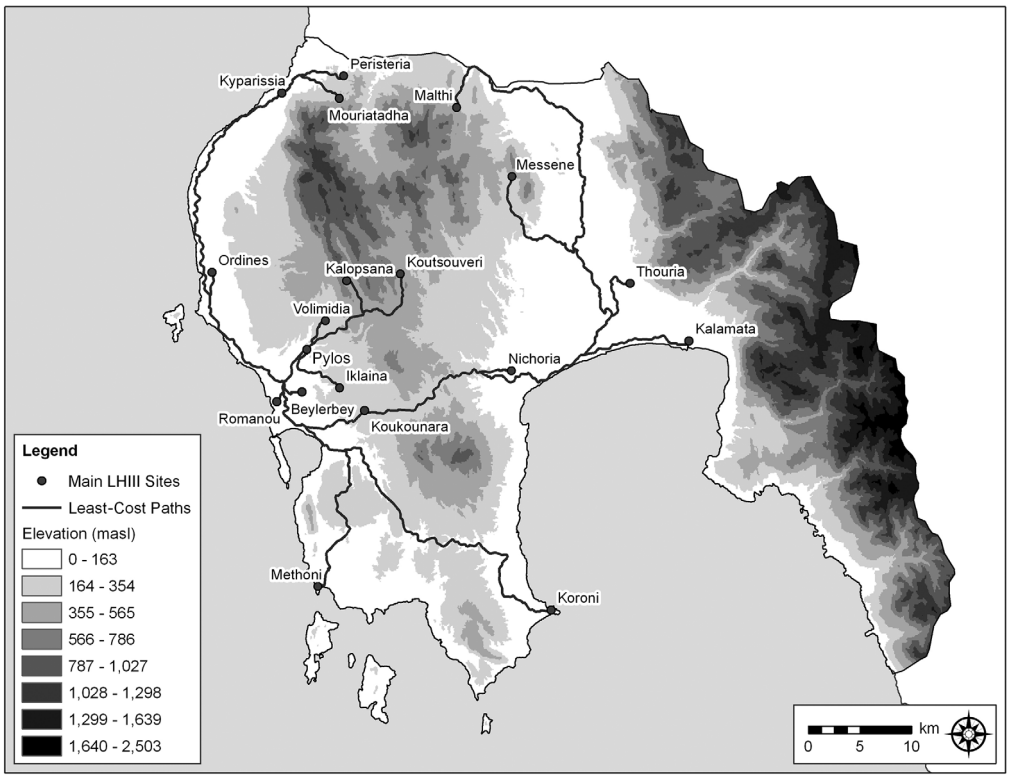


6.7. Least-cost path analysis: Argolid. Rebecca Seifried, University of Illinois, Chicago.

routes, but, more importantly, it was better connected to all other palatial centers than was Pylos.

Least-Cost Paths

As a result of these various differences in local and regional geography, political economies were deployed differently in Messenia than they were in the Argolid. To study local, political-economic interactions, least-cost paths based on slope were mapped from each large center in the Argolid and Messenia to Mycenae and Pylos, respectively (Figures 6.7 and 6.8). This allows identification of the most cost-efficient routes – in terms of energy – for traveling between the settlements in each region. As expected, both path systems take advantage of flat land. However, while the system in the Argolid is dendritic, that of Messenia is circulatory, a pattern first identified by Lukerman (1972) forty years ago. There are only a few ways of traveling to Pylos, and none of them is very direct. Secondary centers like Nichoria, Koukounara, Ordines, and Romanou/Beylerbey were key nodes in the system, perfectly positioned to intercept people, things, and information. Unlike Pylos in Messenia, in the Argolid most roads led directly to Mycenae. There were no intermediary, secondary nodes, which illustrates the relative independence of the Argive palatial

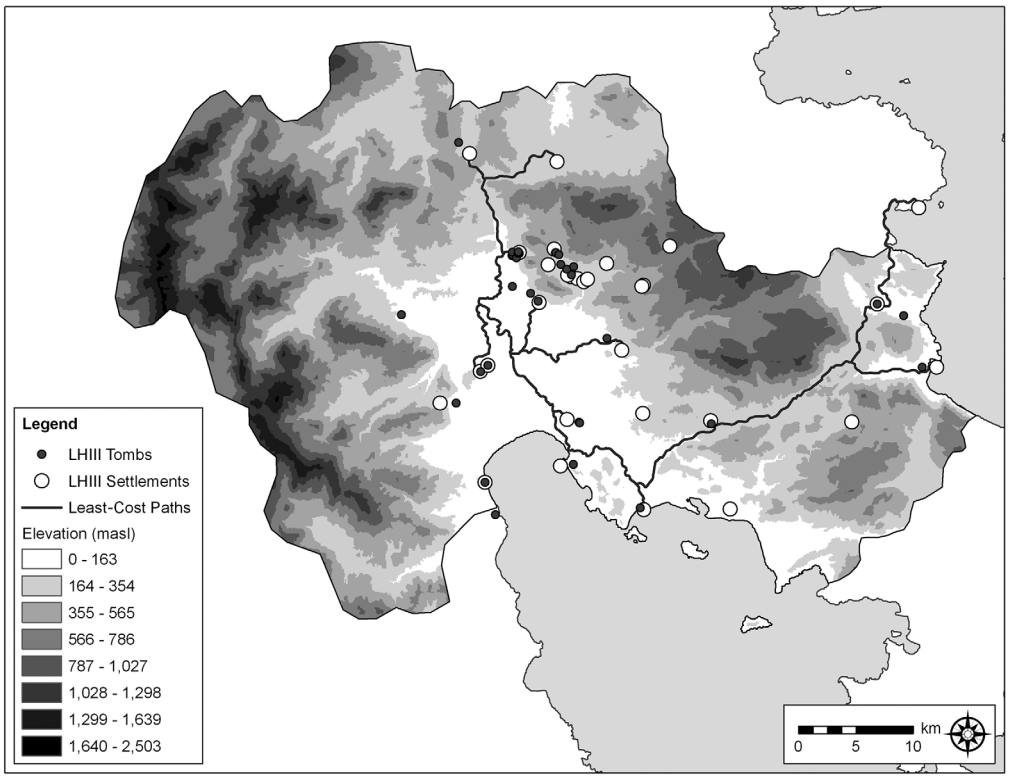


6.8. Least-cost path analysis: Messenia. Rebecca Seifried, University of Illinois, Chicago.

centers. Messenia's system of transportation and communication was made to serve the political-economic needs of the palace – a point reinforced by an analysis of the sacred landscape.

Sacred Sites

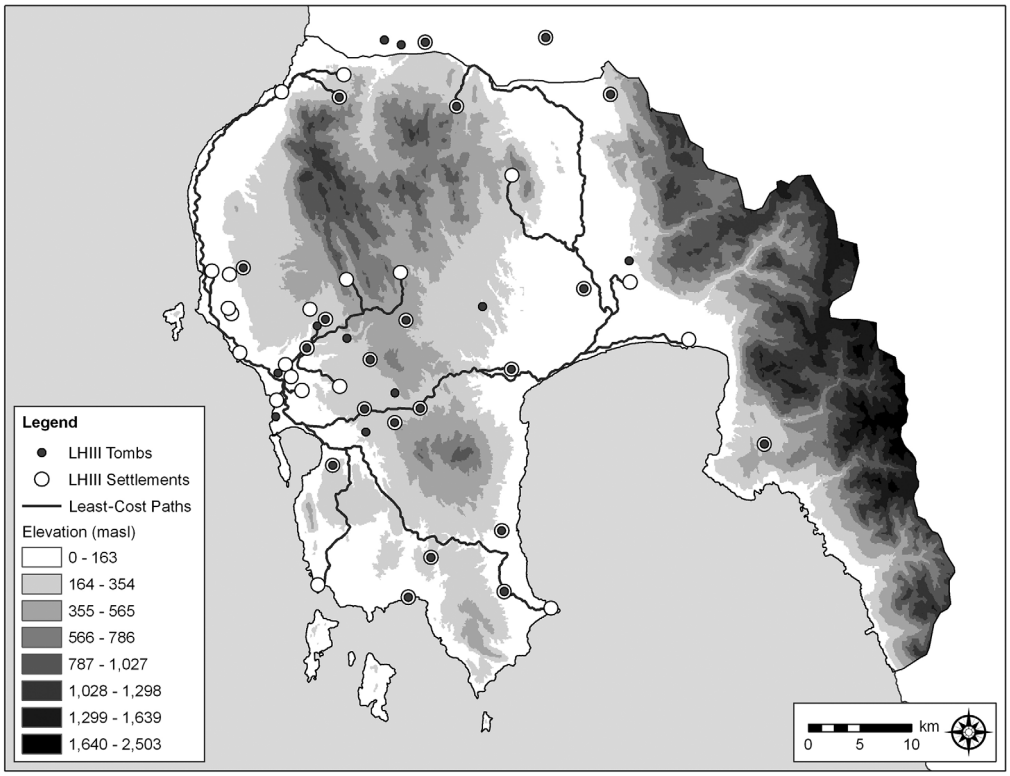
To study the Argive and Messenian sacred landscapes, the locations of chamber and tholos tombs were mapped and their distribution in relation to palatial centers and the cost path systems was analyzed (Figures 6.9 and 6.10). It can be assumed that tombs, especially tholoi, were symbols of power and sites of memory (see Bennet 1995). Conclusions mirror those reached by Voutsaki (1998) based on her comparative analysis of Argive and Messenian mortuary systems. As discussed by Voutsaki (1998), the Argolid has far fewer tholos tombs than Messenia, but those tend to be larger in size and located near palatial sites. Messenia's tholos tombs are more numerous and much more dispersed. But, as discussed by Bennet (2007), most of these were no longer used by 1300 BC, and those still in use were associated almost exclusively with the palace. In Messenia, Pylos took a shared sacred landscape of tholoi and erased it. This transformation did not happen in the Argolid, where, again, secondary centers were independent palatial peers to Mycenae.



6.9. Tomb locations: Argolid. Rebecca Seifried, University of Illinois, Chicago.

Political Economy

Several conclusions regarding Mycenaean political economy can be drawn from the preceding analyses. First and foremost, the Argolid and Messenia, as two Mycenaean regions among many, were indeed very different from one another. The history of Mycenaean Messenia was one of competition over land, which necessitated the incorporation of nearby secondary centers, like Iklaina, where several large buildings were destroyed in late LHIIIA and rebuilt in early LHIIIB along different architectural lines (Cosmopoulos 2006). However, as the catchment analysis demonstrates, incorporating secondary centers did not allow Pylos to access much more productive land. The real prize was instead the Further Province, taken at the start of the LH IIIB period. A similar process of expansion and incorporation did not happen in the Argolid, where many large sites, several of them palatial, shared a space that is small in area but replete with flat land and high-quality soil. Consequently, there were possibly as many as three distinct states in the Argolid by Mycenaean times. Why, then, did a similar process of state formation not occur in the Further Province of Messenia, where the geography of the Pamisos plain resembles that of the



6.10. Tomb locations: Messenia. Rebecca Seifried, University of Illinois, Chicago.

Argive? A comparison of Mycenaean interaction spheres helps to answer this question.

Pylos was poorly positioned to access Mycenaean and wider Mediterranean trade routes, especially when compared to the Argolid states and Mycenae in particular (Figures 6.1 and 6.2). Whereas Pylos and the other western Messenian sites took advantage of their access to Mediterranean – including Minoan – trade routes in Early Mycenaean times, by Late Helladic III they had other concerns, and so turned inward. This conclusion is further reinforced by the work of Murphy (2013), who has found that the vast majority of exotics from Messenian tombs date to the Early Mycenaean period, *not* to the period of the palaces.

Because Pylos had incorporated sites throughout Messenia, control of transportation and communication networks was paramount. As the least-cost path analysis demonstrates, the geography of Messenia lent itself to such an effort, and various large, long-lived settlements, such as Nichoria and Koukounara, were perfectly positioned to control overland movement. Sites like these became important district capitals in the LH IIIB Pylian state. Messenia's mortuary landscape had developed during a period of intense, widespread competition between sites, which lasted into the LH III. A similar period of

competition had occurred in the Argolid, but as demonstrated by Voutsaki (2010), it had largely ended by the beginning of the LH, representing the shift from a "kinship"-based economy to a "palatial" economy. Given Messenia's geography, this shift took longer to effect and was not without conflict and pain. The Messenian sacred landscape, as represented by widespread tholos tombs, reflects a similar kinship-based, more corporately organized economy. This political economy was replaced by a palatial one by the Late Helladic III, and a sacred landscape that graphically and powerfully represented the earlier order was effaced.

When the end came, both Pylos and Mycenae were destroyed, but for different reasons. Pylos had turned the geography of Messenia to its own purposes. In this regard, it was not at all different from states the world over, including modern ones. When Pylos fell, the whole system went with it. The polities of the Argolid were much more compartmentalized. Not surprisingly, Tiryns lived on even as Mycenae crumbled.

MYCENAEAN GLOCALISM

Having compared geographic and political-economic differences in both the Argolid and Messenia, it is now possible to assess their variable roles in the Mediterranean world system and as conduits for people, things, and ideas moving to and from Europe. Mycenaean states were second-generation, secondary products of contact between Greek chiefdoms and Minoan states, which accelerated during the late Middle and early Late Bronze Age (Parkinson and Galaty 2007). Whereas the Minoan states can be characterized as corporate and heterarchical, the Mycenaean states were strongly networked and exclusionary (Blanton et al. 1996). And yet, there are apparent differences in terms of how each Mycenaean state was formed and organized. These differences stem in part from geography, as described in the preceding text, but also from variable experiences of contact with the Minoan states and the wider Mediterranean world system.

Recently, models of Mycenaean political economy have been reconceived and revised. Mycenaean elites are no longer thought to have operated redistributive, command-and-control economies (Galaty et al. 2011); rather, as documented in Linear B, they appear to have focused narrowly on mobilization of the raw materials and the labor forces necessary to support the production of various kinds of prestige goods. They did not administer regional economies per se, and much economic activity took place outside the purview of the palace. In fact, artifact distributions in Mycenaean settlements are best explained when a model of regional market exchange is applied (Parkinson et al. 2013). Given that there was much room in Mycenaean political economies for local agentive action, to what extent did glocalized behaviors affect

the entry of different Mycenaean states into Mediterranean systems of trade, through time? A brief look at pre- and Early Mycenaean burial customs is instructive in this regard.

Burial Customs

As demonstrated by analysis of the artifacts from the Shaft Graves, Mycenae appears to have been in close, early contact with the Cyclades (e.g., Kolonna on Aegina) and Crete, and, probably indirectly, with various Near Eastern (including Anatolian) and African states, as well as with Europe (as indicated by amber and gold). Likewise, Pylos was in close, early contact with Crete, perhaps through the Minoan colony on Kythera, as well as with the Near East and Africa, again indirectly. On the Greek mainland in the late Early and Middle Bronze Age, most individuals were buried in chamber tombs and cist graves with few grave goods. Beginning in the early Middle Bronze Age, tumulus burial became common, in particular in Elis and Messenia in western Greece (Muller 1989). Tumuli occur in far fewer numbers in the Argolid, and elsewhere, and tend to be later (Middle Helladic II-III). It is difficult to avoid the conclusion that mound burial spread south into Greece along the Eastern Adriatic coast from Dalmatia via the Ionian Islands. Unlike tumuli, the earliest tholos tombs are found on the Mesara Plain of Crete and housed the remains of whole communities. The first tholoi on the Greek mainland were built in Messenia and, like those on Crete, generally held a (relatively) wide cross-section of the local population. Those in the Argolid held far fewer individuals and were concentrated at Mycenae. Thus, from the start, we can identify quite different burial customs in the Argolid versus Messenia, which stem primarily from different initial experiences of the evolving Mediterranean world system.

Elite individuals in the Middle to Late Bronze Age Argolid appear to have had direct access to Minoan prestige goods (and, perhaps, craftsmen), a market that Mycenae eventually cornered. Prestige goods were used in competitive fashion to distinguish "warrior chiefs" – who may have traveled to Crete – and their immediate family members, both in life and in death (Wright 2008). It has been suggested that the key to Mycenae's success was control of the gold trade, which began in the Carpathians (Davis 1983) and passed through, or included, north Greece (Vavelidis and Andreou 2008); more than 15 kg of gold was found in the Shaft Graves at Mycenae alone. Unlike the Argolid, Messenia sat at the tail end of an interaction sphere that formed in the Early Bronze Age and spanned the Adriatic. This interaction sphere is marked by the presence of Cetina-style pottery at sites throughout the Adriatic (and in smaller numbers in the Aegean) (Tomas 2009), now including Messenia (Rambach 2011). Messenia also had contacts with Minoan Crete, but these contacts were mediated by the Kytheran colony and were therefore different than Mycenae's;

they lead to more "corporate" systems of political economy, at least at first. The people of Messenia adopted the tholos tomb and used it in ways that mimicked the Minoans for communal burial. The Early Mycenaean predecessor to the LH IIIB palace at Pylos, which is admittedly poorly known, also demonstrates Minoan architectural influences and may have included a central court (Englehardt and Nagle 2011). Messenia thus had Adriatic leanings and a different, perhaps less confrontational, relationship with Minoan Crete. Mycenae had Balkan connections and a direct, possibly adversarial, relationship with Minoan Crete. Unlike Mycenae, which had gold, it is unclear what Messenia had to offer the Minoans in the way of trade goods and raw materials. It may be that the Minoans sought to tap into the Adriatic interaction sphere, and Pylos was a gateway to this (relatively distant) trade zone, one that avoided Mycenae.

Wanax and Damos

The Mycenaean political economy was characterized by tension between the ruler, the "wanax" (*wa-na-ka*), and his subjects, represented by the "damos" (*da-mo*), perhaps a kind of provincial, or community, council. The wanax sat at the top of a strongly hierarchical social system. He appears to have had military and religious obligations, and held frequent feasts in a large building, a "palace," at the center of which was a "megaron," a throne room with a large central hearth. He and teams of scribe-administrators, who were also members of the upper class, ran a wealth-financed economy, based on the production and consumption of various prestige goods, including perfume, cloth, chariots, weapons, and jewelry. The industrial activities of the wanax were supported through a system of indirect, proportional taxation. In Messenia, administration officials based at Pylos collected a suite of six commodities from at least sixteen districts, through district capitals, as described in the Linear B documents. Oddly, international shipments of finished goods are never recorded in Linear B. Perhaps trade took place seasonally (i.e., during the sailing season) and the extant tablets are from the wrong season. Or, scribes did not record international transactions because they were handled by the wanax, by independent merchant elites, or both. Or, it may be that Pylos did not engage in substantial international trade during the LH IIIA-B. The opposite appears to have been true at Mycenae and Tiryns, where there is much evidence for international trade during LH IIIA-B, although, as with Pylos, none of it is recorded in Linear B.

As modeled in the preceding text, the expansion of the Pylian state was quite different from that of the Argolid states. By the Early Mycenaean period, there were several competing centers in Messenia. Eventually, Pylos conquered them all, those in both the Hither and the Further Province (Bennet 2007).

In the Argolid, as many as three state centers coexisted. It is not known what kind of relationship Mycenae, Tiryns, and Midea, the three certain palatial centers, had, but they appear to have been peers and rivals, each controlling a different chunk of the Argolid and surrounding territories. It may be that the different evolutionary trajectories that mark the Argolid and Messenia are partly the result of geography, but also reflect very different starting points and very different positions in and experiences of the surrounding world system. Messenia was more "corporate" than "networked" through the start of the Late Helladic, at which point Pylos took over, through force, and instituted exclusionary state tactics. By contrast, in the Argolid, no one center managed to conquer all the rest, and, from the beginning of state formation there, they all emphasized exclusionary strategies. This means that by the time of the collapse, the people of the Argolid had already experienced 400+ years of networked political economy. The people of Messenia experienced only 100 years under Pylian rule, and there are strong indications that the relationship between ruler and ruled, wanax and damos, was not untroubled (Lupack 2011). As described previously, the wanax needed access to land, necessary to produce foodstuffs to support palace staff, his religious obligations, and large state-sponsored feasts, as documented in Linear B. The various damoi, the local communities, appear to have held land communally, and (just like today) did not want to part with it or be overtaxed. In one Linear B tablet (Pylos Ep 704), the state adjudicates a dispute between a priestess named Eritha (*e-ri-ta*) and a damos, that of Sphagiānes (*pa-ki-ja-ne*). Eritha tried to claim a smaller landholding for herself (and therefore a lower tax obligation?) by arguing that some of her land was held by her for the damos.

Similar disputes may have occurred in the Argolid. If they did, they were not recorded in Linear B. Then again, far fewer tablets are extant from the Argolid states. It seems, though, that local people in Messenia had far different goals and concerns than did those in the Argolid. As a result, they engaged the outside world in ways that were different from the people of the Argolid. A brief, comparative look at pottery production and ports in the two regions helps make this point.

Pots and Ports

By the Late Helladic IIIB, most of the pottery in the Argolid appears to have been produced at Mycenae, much of it for export to the Eastern Mediterranean. In Messenia, some pottery may have been made at the palace, but there appears to have been at least three, possibly four, competing workshops in the region during the Late Helladic (Galaty 2010). None of the pottery from Messenia was exported, at least to the Eastern Mediterranean. Pottery is one product amongst many in Messenia that was distributed through local exchange networks, and

while mass-produced in at least one workshop – perhaps associated with the palace and run by a "royal" potter mentioned in Linear B – no one pottery workshop dominated the rest. Whereas pottery manufacture in the Argolid had been centralized for generations prior to collapse, first at Berbati, the valley to the east of Mycenae, and later at Mycenae, at the so-called Petsas House (Shelton 2010), thus allowing an economy of scale that encouraged international trade, pottery manufacture in Messenia was relatively decentralized. The structure of the Messenian pottery industry reflects its deep regional roots and the relatively recent integration of the regional economy under Pylos, which did not or could not control pottery production fully. A similar pattern is reflected in the distribution of Melian obsidian in Messenia, all of which came into the state via the port site of Romanou (Parkinson 2010). Production and distribution of obsidian blades was not centralized at the palace. It was under the control of local craftsmen who operated outside the purview of the palace and must have engaged directly, and independently, with seafaring merchants.

The location and nature of Mycenaean ports further reflect differences in the organization of Mycenaean states. The main port in the Argolid must have been Tiryns, which was also a palatial center. It is hard to believe that Mycenae controlled Tiryns; nevertheless, access to the sea must have been through Tiryns, perhaps using independent merchants who operated out of the port. Another, intriguing possibility is that Mycenae tried to establish its own port town, as an alternative to Tiryns, at the newly discovered site of Korfos-Kalamianos on the western Saronic coast (Tartaron 2010). The Messenian port town at Romanou was not palatial, like Tiryns, and was subordinated to the palace at Pylos, perhaps as a district capital. This seems to have been the normal pattern in the Aegean, where inland palatial centers were typically paired with a nearby port. Only in the Argolid, however, did the main port constitute a palatial center in and of itself. For this reason alone, systems of trade and interaction must have been quite different in the Argolid as compared to Messenia.

MYCENAEANS IN THE ADRIATIC

With the foregoing as background, it is now possible to discuss the differential effects of trade and the transmission of ideas from the Eastern Mediterranean through the Aegean and into Europe (cf. Kristiansen and Larsson 2005: 153). What was transmitted and via which routes would have been affected strongly by timing – that is, when during the Bronze Age connections were established – and directionality – that is, through which Mycenaean state(s) connections were effected. Mycenaean links with the Adriatic may serve as a primary example.

As Schon (2009) describes, the amount of foreign trade during the Early Mycenaean period (MH III-LH II) was exceedingly small; fewer than 50

objects and 20 contacts over the course of 300 years. Much of this trade, with the possible exception of amber, was likely funneled through Minoan Crete and Kolonna on Aegina, and was therefore indirect and down-the-line. There are few, almost no, examples of definite Early Mycenaean artifacts found outside of Greece, with the exception of small amounts of possibly Early Mycenaean pottery from Italy (Sgouritsa 2005) and Syria-Palestine (Leonard 1994). The Early Mycenaean pottery in Italy is "enigmatic" and its precise origin is not known (Merkouri 2010). Mycenaean-Italian connections, however, become more and more important through time, and are discussed in more detail in the following text. Early Mycenaean pottery in Syria-Palestine almost certainly arrived from the Argolid via Crete and does not demonstrate a direct, sustained connection between Greece and the Near East. As noted previously, and by Kristiansen and Larsson (2005: 211–212, and figure 96), the more interesting and, perhaps, meaningful link during this period was that forged with the Balkans. However, whereas Balkan-style artifacts arrive in Early Mycenaean Greece, Early Mycenaean artifacts do not appear in the Balkans. The primary influence appears to have been from north to south, not the other way around.

Foreign trade increased tremendously during the Late Helladic III, and the trade patterns are interesting. The Argolid states shifted their attention to the Eastern Mediterranean, having knocked Minoan Crete out of the picture. As noted previously, Messenia appears to have disengaged from this interaction sphere during LH III. Trade with Italy increased, to the point that some archaeologists speak of Mycenaean colonies there; however, many of the "Mycenaean" pots from Italy were imitations made using local clays (see, e.g., Buxeda et al. 2003; Vagnetti 2000–2001: 113); therefore, explaining the exact relationship between Mycenaean Greece and Italy is difficult. It is not known exactly where the imported Mycenaean pottery in Italy was made, and the archaeometric data are unclear (Jones et al. 2002). The Italian pottery does not match the Argolid's well-known Mycenae-Berbati group, and a source in Messenia cannot yet be ruled out (Sgouritsa 2005). Moreover, much of the pottery tested is not diagnostic. That which can be dated tends to be from the LH IIIC period: that is, after the fall of the palaces. Very little Mycenaean pottery is found elsewhere in the Adriatic, with the exception of the Ionian Islands, where there are Mycenaean sites, and Northwest Greece. No certain Mycenaean pottery has been found along the Dalmatian coast (Tomas 2009). What Mycenaean pottery there is from Albania tends to be LH IIIC and is found mostly in far southern Albania (Galaty and Lafe 2008; Lafe and Galaty 2009). People living along the Albanian and Dalmatian coasts and inland during the Bronze Age appear to have been more interested in acquiring bronze weapons; therefore, it seems likely that Mycenaean contacts in the Adriatic, prior to 1200 BC, were focused on a search for alternative ore sources (Galaty 2007). These trade missions may have been launched from bases in the Ionian

Islands and Epirus and may have increased in frequency following the collapse (Sherratt 2012). The northernmost certain Mycenaean settlement, marked by a small tholos tomb, is that of Glykys Limin in north Epirus near Preveza, which Tartaron (2004) describes as a "port of trade" or "gateway" community.

There are two routes whereby the Mycenaeans may have accessed the Adriatic. One route ran from Messenia up the coast of western Greece. The other ran through the Gulf of Corinth. We may assume that the former was employed by Pylos and the latter by the Argolid states. Both passed by Mycenaean sites in the Ionian Islands, and traders may have sailed from them to Italy before crossing back over and moving up the Eastern Adriatic coast. An overland route via the northern Aegean is also possible, through Thessaly or Macedonia for example, and may have been accessed by Mycenaeans at Iolkos (Adrimi-Sismani 2007).

Based on the preceding (very brief) review of Mycenaean contacts with the Adriatic, some tentative conclusions can be drawn. First, the evidence for any kind of foreign interaction during the Early Mycenaean period is scant at best. Eastern Mediterranean influences on Mycenaean Greece appear to have come indirectly via Crete as well as from the north, roundabout, by way of the Carpathians, perhaps associated with the gold trade. These influences were most strongly felt at Mycenae. Second, by LH III the various Mycenaean states, with the exception of Pylos, were mostly engaged in Eastern Mediterranean trade. The Cyclades, Crete, the Dodecanese, and SW Anatolia were brought under strong Mycenaean influence, if not outright control, and Mycenaean states were in close contact with Cyprus, Syria-Palestine, and Egypt, as demonstrated by the Uluburun wreck. Contact with the Balkans waned, although there are numerous reports of Mycenaean pottery in Macedonia and Thrace, including FYROM and Bulgaria. It is not known which Mycenaean state forged the initial Italian connections, but it may have been Pylos, operating through the Ionian Islands (cf. Sgouritsa 2005). Third, most of the nonimitation Mycenaean pottery from the Adriatic appears to be LH IIIC. If Pylos forged the initial contacts with Italy and the Adriatic, these were eventually co-opted by Mycenaean elites in the Ionian Islands. Ionian Mycenaean settlements grew following the collapse, perhaps due to an influx of refugees. It may be that these refugees came from Messenia, which was almost completely depopulated after 1200 BC.

The upshot of all of these developments is that if Eastern Mediterranean institutions spread into Europe via a southern "Mycenaean" route, as proposed by Kristiansen and Larsson (2005), it may have been far less important than the earlier, northern, steppe route. Any such spread may not have come via Mycenae and the other Argolid states, but, rather, may have been routed through Pylos and the Adriatic, primarily through Italy. This would explain the large amount of "handmade burnished ware" at Pylos, which may have

an Italian/Adriatic origin, as well as at the port of Kommos in Crete (Rutter 2012: 82–85). If Pylos was a conduit for secondary-state influences in Europe, then a very particular kind of Mycenaean political economy would have been propagated, one quite different from that of the Argolid, and one colored by very specific local Messenian needs and wants.

CONCLUSION

To conclude, each Mycenaean state was very different from the other, and Pylos in particular was quite different from Mycenae and the other Argolid states. These differences have a geographic basis rooted in differential access to regional resources, land and soil in particular. However, different Mycenaean states also traveled very different paths to complexity, reflected in quite different political economies. This development happened in no small part due to very different connections between the various Mycenaean states and the developing Mediterranean and European world systems. Messenia was drawn into the Early Bronze Age "Cetina" interaction sphere and maintained strong ties with the Adriatic through the Middle and Late Bronze Age. Like the Argolid, it also had early ties with Minoan Crete, but these encouraged "corporate" behaviors. Whereas the Argolid states evolved as networked peer polities and no state conquered the others, in Messenia, Pylos had established itself as the sole political-economic center by the end of LH IIIA. As a result, the LH IIIB Pylian state was rife with local social conflicts, signified in life and in death, between the wanax and his people, throughout the regional economy. The Linear B tablets seem to indicate some kind of crisis or "state of emergency" at the end of the palace period, just prior to state collapse (Baumbach 1983). For example, a coast guard was established (described in the "o-ka" series of tablets; Uchitel 1984) and "temple" bronze was requisitioned from various settlements for the production of weapons (Pylos tablet Jn 829; Smith 1992–1993). It may be that Pylos experienced threats from the west along with a shortage of bronze in the LH IIIB, which spurred Adriatic exploration. However, these voyages may well have been made by private merchants, with or without the input of the palace. It has even been suggested that local Mycenaeans, presumably from Messenia, created reciprocal trade agreements with local Italians during LH IIIB to obtain staple goods, such as olive oil, that were in short supply and controlled by the palace (Borgna and Cássola Guida 2005). Whatever the precise sequence of events, whether refugees from Pylos fled to the Ionian Islands and perhaps onward to Italy and southern Albania, it was a very specific, "Pylian" form of Mycenaean political economy that would have been transmitted to Europe, if it was transmitted at all. Messenian belief systems, iconography, military practices, and religious organizations were necessarily different from those of the Argolid. Given the

late prehistoric record of the Adriatic, in places like Albania for instance, the Mycenaeans appear to have had little or no impact. The northern steppe route may indeed have had the more lasting effect. In fact, Adriatic cultures might even be implicated in the foundation and further development of the Greek Iron Age polities that replaced the Mycenaean states and birthed the Classical *poleis*.

NOTES

1 This section reports data first presented with Daniel Pullen, William Parkinson, and Rebecca Seifried at the Aegaeum 14 "PHYSIS" conference, held in Paris in December 2012. Geographic and archaeological data about the Argolid and Messenia were entered into a geographic information system (GIS). In defining the boundaries of the Argolid and Messenia, modern provincial borders were followed whenever possible, with the notable addition of the Nemea and Kleonai valleys to the Argolid. The GIS methods used are reported in greater detail in the publication of the conference proceedings (Galaty et al. 2014).

2 Slope was calculated for both regions using SRTM3 90-meter elevation data, which were refined by Jarvis et al. (2008) and distributed freely to the public.

3 Sailing times from Nauplio, the Argolid's port, to Chania and Iraklio on Crete were 1.94 and 2.50 days and from Pylos to Chania and Iraklio 2.22 and 3.06 days.

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SEVEN

DECONSTRUCTING CIVILISATION: A 'NEOLITHIC' ALTERNATIVE

Michael Rowlands and Dorian Q. Fuller

INTRODUCTION

In his recent books *The Theft of History* and *The Eurasian Miracle*, Jack Goody has summarised the arguments he has made over forty years or more of writing against Eurocentric bias in world history. For what has become a familiar argument recently, Goody has maintained that throughout all the major societies of Eurasia, modern urban cultures represented a continuous development from the Bronze Age (Goody 2006: 55). The 'big break' for Goody was from 'Neolithic Society,' and he relied on Gordon Childe's (1950) treatment of the Bronze Age as the first 'commercial civilisations' (identified by a trait list, i.e., urbanism, early state formation, literacy, trade and commerce, monumental architecture). Long-term world history since the Bronze Age has, therefore, been shaped by continuity, but instead of privileging an evolutionary succession from classical antiquity to feudalism and capitalism in Europe, Goody argued for the presence of competing and alternating centres of wealth accumulation and inequality throughout Eurasia (Goody 2006).

Goody's writing is one element present in a significant literature on world history that agrees on the overcoming of eurocentrism or, as Philippe Beaujard has maintained, instead gives a crucial role to the non-European world for the history of humanity (Beaujard 2009: 7; Chakrabarty 2000). In Beaujard's case, this is not just about providing a wider focus on Eurasia, but also Africa, the Indian Ocean and long-term interactions between continents as much

as within them, and more of a focus on oceans rather than on land masses as centres of interaction.

He shares a claim with many others, which also counters Huntington's 'Clash of Civilisations' thesis, that: 'During the greater part of the history of humanity, contacts between civilizations have been intermittent or non-existent' (Huntington 1996: 48).

Continuity in the historical long term has also been emphasised by those taking up the theme of 'capitalism' or 'globalisation' being a feature of the last 5,000 years (e.g., Frank and Gills 1993). Queries about the nature of the social units involved and whether another ethnocentrism of the state as society has not also crept in have been made by several authors (cf. e.g., Bentley 1996), and in line with more general writings on transnationalism and transculturalism, provide a more rhizomic perspective exploring connectivity and flows of persons and things. However, the basic argument, which originated with Morgan's writings on ancient society and Gordon Childe on the urban revolution as a distinct break associated with the rise of the Bronze Age, is more or less unquestioned (Childe 1950; Morgan 1875).

Of course, this means that areas that do not display these Bronze Age urbanised 'civilisational' attributes tend to get marginalised. Africa is one of these massive lacunae. It is ironic that Goody's own anthropological specialty should be Africa, and yet his general approach is to define it as 'other' to the main Bronze Age civilisations of Eurasia and their long-term development. Within his schema, he attributes this historical marginality to 'technological features' related in Africa to the control of wealth in people rather than in landownership. This, he argues, has led to inertia in acceptance of innovations, or as in the case of the spread of iron metallurgy in Africa, development within a limited and mainly magico-religious context (Goody 2012). For Goody, Africa remains 'firmly placed in the Neolithic, and not the Bronze Age' (Goody 2010: 45), by which he did not mean an evolutionary stage (in the evolutionary schema advocated by Morgan and Childe), but more in Levi Strauss's sense of the Neolithic as a strategy of material practices embedded in a 'science of the concrete' (based on 'perception and imagination as against a logic removed from intuition' (Levi-Strauss 1969: 15; 22). Goody left Africa out of the equation of global history because it did not fit a more rational political economy view of what 'happened in history.' As a consequence, Africa becomes an enigma; a continent without a history of urbanism, literacy, and empires, except for the tendency among some historians to exaggerate as state/urban the distributed settlements and networks of the 'empires' of Ghana and Mali. The danger, of course, is that any alternative idea of civilisation in Africa can be assumed to have been of a similar, if prior, socio-political form to a Bronze Age civilisation: a kind of elementary form of state or urbanism even if of a different order. Assigning 'Africa' to some category of the 'prior' is due

to the fact that there is only one intuitive single scale of evaluation, which for Africa is deficient in its gradation from 'simple' to 'complex' and from prehistory to history. If Africa is 'stuck in the Neolithic,' then it seems to have only a 'prehistory' that would of course be anathema to many. However, within the logic of a 'science of the concrete' described by Levi Strauss, a 'Neolithic modernity' might be possible if for no other reason than the opportunities it provides for thinking about alternative futures in the age of the Anthropocene (cf. Chakrabarty 2009).

Africa, of course, is not alone in not having histories of indigenous urbanism, literacy, states, and empires on which a long-term global history can be based. Much of the 'global south' from Oceania to the Americas has been recognised as mislabelled in this way. However, it does provide us with the opportunity to explore the possibility of an alternative pattern – not of deficiency but of ontological difference – suggesting in turn that the whole focus on Bronze Age urbanism or civilisations as the origin of modernity is quite misplaced.

THE UNITY OF AFRICA

What makes Africa, stuck in the 'Neolithic,' so different? The historical development of Euro-Asian 'empires' has done much to encourage thought on the ideal unity of empire and civilisation. The heritage of the Roman Empire remains a Western nostalgia that attempts to re-achieve unity (e.g., the ideal unity of imperium and *orbis terrarium*) that the Holy Roman Empire, the time of Napoleon, and the idea of a thousand years of Hitler's Third Reich have done little to dispel either as threat or aspiration. The concept of 'empire,' based on the writings of the European experience, emphasises unity as achieved ideologically through the imposition of some kind of universality even though the reality of the form this might take was adapted to the historical forces that dragged them into ever-increasing differentiation. Max Weber's description of political order based on his concept of sovereignty remains an essential issue for recognising different philosophical notions of empire as a community of shared universality. For example, after the conquests of Alexander the Great, the Stoic philosophers argued that Greek civilisation had a single mission: to create a shared *oikoumene* characterised by universal reason. Or, in the Roman Empire, it was believed that conquest would lead to the union of all civilised peoples witnessed in the standard architecture of the forum, found in all Roman colonial cities, symbolising the peace, order, and justice promised to all citizens (cf. Folz 1969). By idealising the achievement of universality, it was assumed that the fusion of empire with civilisation could be achieved.

Arguably, these 'Western' debates on empire and civilisation, and their *longue durée* have been positively harmful for understanding the long-term prehistory of Africa and many other parts of the 'global south,' and need to

be set aside. The most obvious instance of this harm is the thesis on African civilisation associated mostly with Afrocentrist writers, such as Cheikh Anta Diop (1974), who sought to fit Africa to the Eurocentric notion of civilisation by deriving Egyptian civilisation from sub-Saharan hyperdiffusionism (see MacDonald 2003 for a critical archaeological assessment). As president of a postapartheid South Africa, Thabo Mebeki's attempt to revive the ideal of an African renaissance by redeveloping a consciousness of Africa as a unity (particularly 'African' diasporas) is undeniable and of considerable importance. As the following quote from his famous 'I am an African' speech at his inauguration in 1998 as president of South Africa shows, the ideal is that Africa once had, and will again have a monumental civilisation.

> To perpetuate their imperial domination over the people of Africa, the colonisers sought to enslave the African mind and to destroy the African soul. They sought to oblige us to accept that as Africans we had contributed nothing to human civilisation except as beasts of burden … The beginning of the rebirth of our continent must be our own rediscovery of our soul, captured and made permanently available in the great works of creativity represented by the pyramids of Egypt, the stone buildings of Axum and the ruins of Carthage and Great Zimbabwe. (Mbeki 1998: 299)

Mbeki's call for a cultural renaissance in Africa was meant to revitalise the pan-Africanism of Senghor, Nyerere, and Nkrumah, in particular their belief that, until a sense of cultural unity and identity was established, political change in and the economic development of Africa would remain stillborn. The essence of African authenticity would be revived, they argued, only by a return to ancestral heritage to pursue the goal of economic modernity without the alienating materialism of the West.

The past would unlock the door to the future, but which past had to be very carefully selected, to fit a monumental version of civilisation that was valued in the Eurocentric tradition of social evolution.

What survives is the perception that, if Africa has a distinctive civilisation or universality, then it exists without a history of empire formation or the ideal Western fusion of imperium and *orbis terrarium*. Archaeologists, concerned with the development of 'complex societies,' have been most explicit about this connection in describing the pre-colonial African context (cf. LaViolette and Fleisher 2005; Schmidt 2009). Taking up an argument made by Carole Crumley, who questioned whether hierarchy was a necessary feature of densely populated, urban settlements (in Early Iron Age Europe), the Macintoshes excavating at Djenne Jeno in Mali, a major medieval trans-Saharan trading city in the Niger Delta, described the 'Empire of Mali' as heterarchical rather than hierarchical, that is a system 'where each element in a social system is either unranked relative to other elements or possess the potential for being ranked in a number of different ways' (LaViolette and Fleisher 2005: 335). The

argument that economic complexity may not be linked to political or religious hierarchies to have true 'complex societies' could explain why large population aggregates, such as those found in the 'Empire of Mali,' had no detectable political or cosmological centre. Instead, the form of settlement was a widespread of coeval units of similar form, with evidence of increasing scale and economic specialisation and a lack of obvious stratification or hierarchy. Africa is being recognised as an enigma: a continent without a history of empire formation (except for the perhaps misnamed example from medieval Mali influenced by the trans-Saharan trade cited previously) and a civilisation lacking overall political centralisation and vertical forms of transcendence.

'NEOLITHIC' ANCIENT AND MODERN CIVILISATIONS IN AFRICA

What kind of concept of civilisation should instead be used to understand the African (and many other) situation(s) in which there is evidence of widespread integration and conviviality over long periods, yet where the Childean coordinates of urban transcendence are lacking?

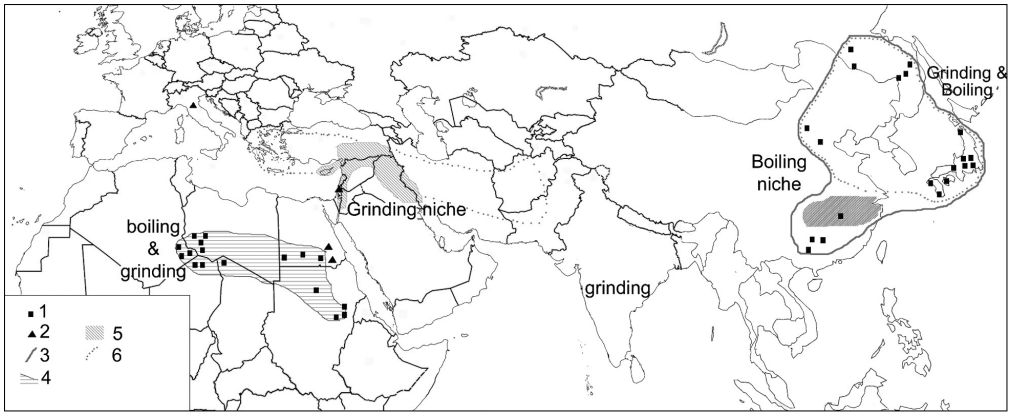
The most promising, least Eurocentric, conception of civilisation in classical sociology and anthropology was the one forged by Durkheim and Mauss (1913, 1971). Durkheim had a theory of social evolution that was singular (from mechanical to organic solidarity), and it might be expected that he would have had a singular theory of the evolution of civilisation. But his collaborator and nephew, Mauss, stressed the histories of civilisations in the plural and rejected connecting them to some hypothetical general evolution of humankind (Mauss 1929/1930: 58). Instead, they start from the largest bounded and solidary human group – political society – which thus far had been the object of Mauss and Durkheim's sociology. However, they also acknowledged that ethnographers and cultural historians in America and Germany had established a less clear, but still distinctly social phenomenon whose spatial extent is larger than political society. Durkheim and Mauss recognised that these 'armchair anthropologists' – using evidence of material culture and technology, styles, language families, and types of kinship, all of which spread over time – had discovered the existence of human entities that had no clear boundaries, single social organism, or 'culture' in the Tylorean or later Gordon-Childe sense, yet were linked to each other in some way that they chose to call a civilisation. The examples that Durkheim and Mauss list at one point (Durkheim and Mauss 1971: 811) include Christian civilisation, Mediterranean civilisation, and Northwest American civilisation. Because civilisations are social phenomena, they are, to Durkheim and Mauss, moral milieus. They determine a certain cast of mind and of conduct; yet, more than 'mentalites,' they travel and spread across social boundaries of all kinds and exist over long periods.

Durkheim and Mauss (1913, 1971) provide an indicative list of such spreading elements: myths, tales, money, commercial goods, fine arts, techniques, tools, languages, words, and scientific knowledge. Some major questions arise: Why in some cases are such things so mobile and in other cases fixed; why some travel and are borrowed, but others are not; and why some merge into and support any one particular political society. The task of ethnology and cultural history, they say in their programmatic way, is to trace these 'civilisational spreads' to their source and establish the direction and form of their spread and encounters with each other. The task of sociology (and anthropology) was to say how they fit together as moral, aesthetic milieus, and how they provided a cosmological unity for several distinct and sometimes diverse 'societies.'

As Mauss defined it, a civilisation consists of 'those social phenomena which are common to several societies.' However, it is important to note that he then insisted that civilisations are socially linked by adding that they must be 'more or less related to each other' by lasting contact 'through some permanent intermediaries, or through relationships from common descent' (Mauss 2006: 61). On the next page, he further refined the concept of civilisation and called it 'a family of societies' (Mauss 2006: 62). It is clear what these permanent intermediaries are in terms of tributary, diplomatic, trading, or marital relations. In the technical terms of his and Durkheim's sociology, a civilisation is the spread of collective representations and practices, which are the social aspect of the materials of civilisation. He says that they are 'arbitrary,' by which he means that they are not universal but preferred modes of making and doing things. In other civilisations, the same things are done in different ways.

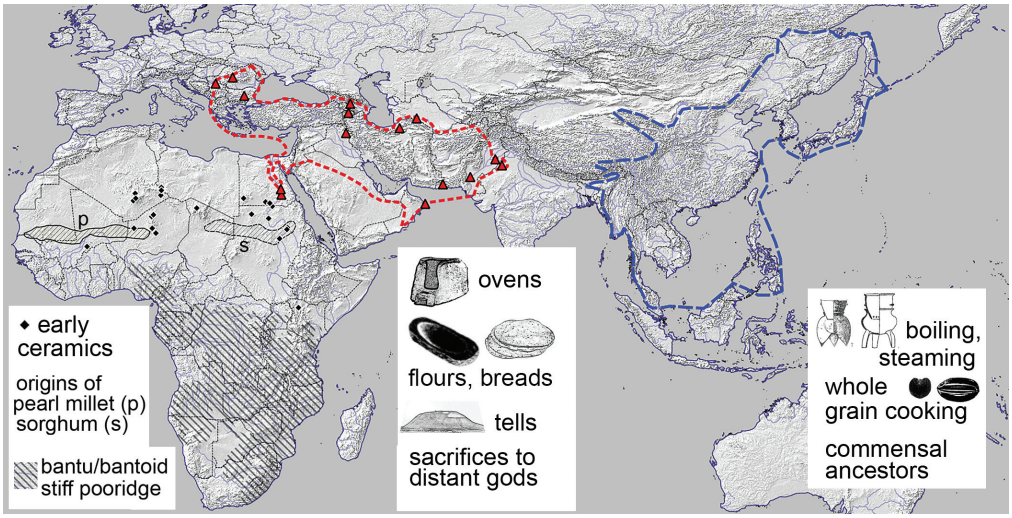
In the actual order of analysis, to say these things belong together as a civilisation is to infer from archaeological and historical evidence a common set of practices and meanings, not one dominant characteristic, design, or thing, but the way in which they all hang together. Tracing their evolution over time and space implies a more ontological cosmological presence. As Durkheim and Mauss state, 'It even happens quite frequently that one phenomenon implies the others. And reveal their existence … To these systems of facts, with their unity and their specific mode of existence. A special name should be given; the most appropriate seems to be that of 'civilisation' (Mauss 2006: 37).

By following the Durkheim and Mauss perspective, scholars can analytically study phenomena that have a definite existence in terms of their ontological politics without the Western bias of assuming the primacy of literacy, urbanism, and monumental architecture. Ironically of course, this approach follows what was forced upon UNESCO, which had to temper its own bias towards monumental tangible heritage as the basis for being inscribed on a World Heritage list by introducing the 2003 convention on intangible cultural heritage that stressed knowledge and performance as the basis for awarding heritage value.

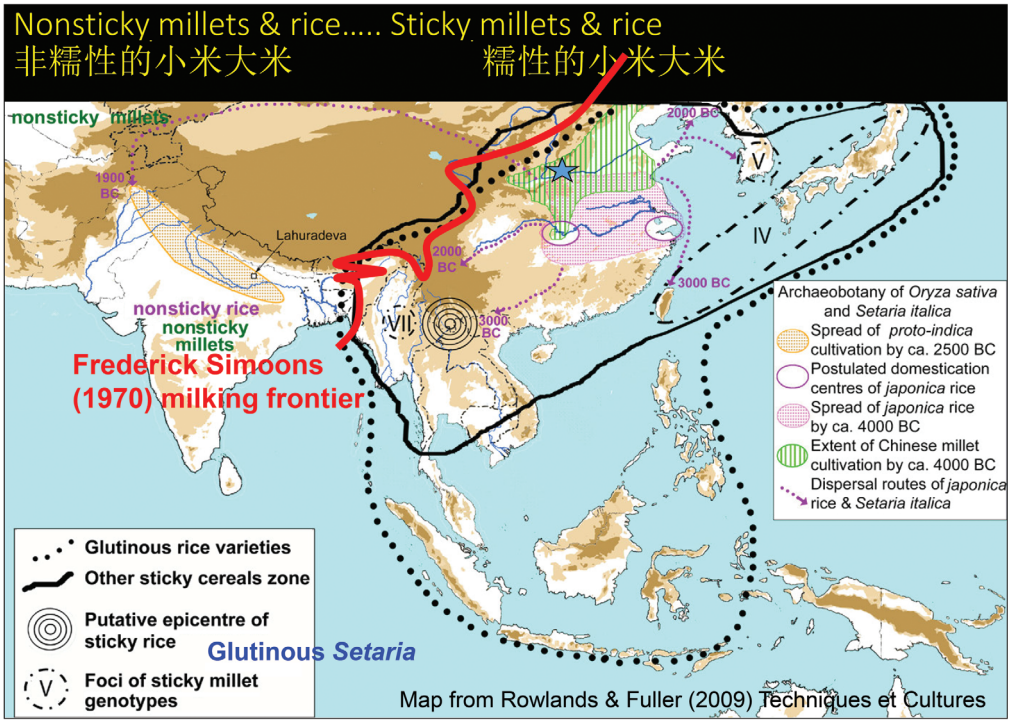


7.1. Map on contrasting Neolithic food traditions (after Fuller and Rowlands 2011). 1 = representative sites of pottery without crops from the Early Holocene; 2 = Late Pleistocene sites of early quern use: Toshka, Wadi Kubbaniya, Ohalo 2; 3 = distribution of pottery Pre-Neolithic, that is Late Pleistocene potting in Eastern Asia; 4 = distribution of Sahelo = Saharan dotty wavy line ceramics/aqualithic complex; 5 = Fertile Crescent zone of prepottery Neolithic agro-pastoral origins; 6 = the expansion of West Asian agro-pastoralism during an aceramic phase up to ca. 6500 BC. By permission of Oxford University Press.

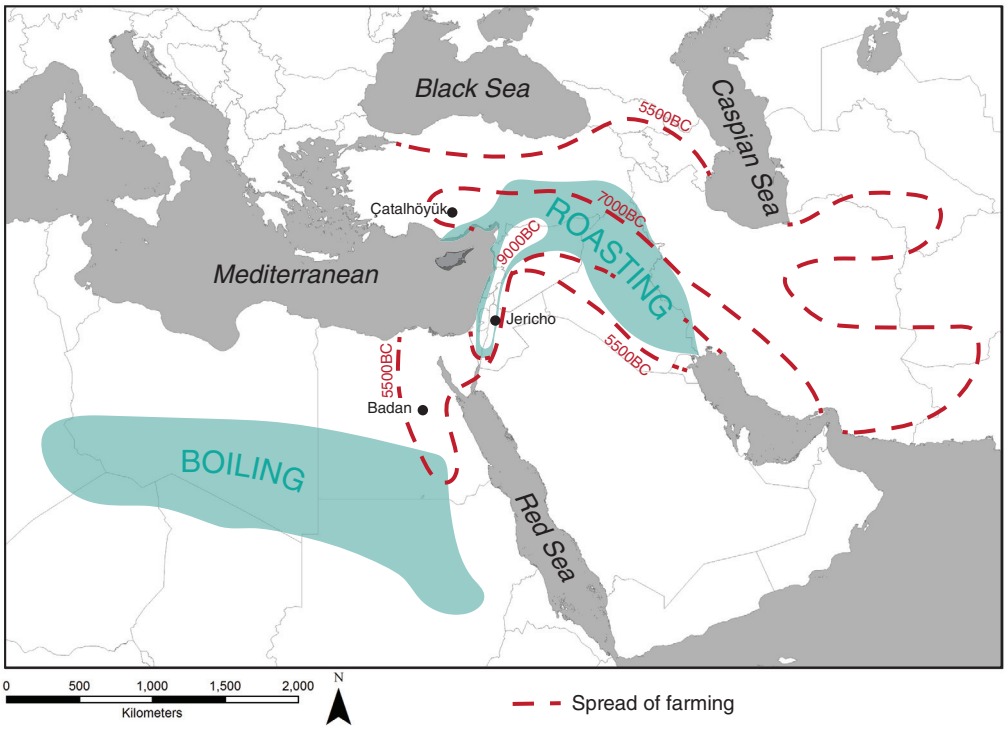
Because the argument for a Maussian perspective on civilisation needs to be specified in more empirical terms, we will continue in a Jack-Goody-inspired way and concentrate on the everyday material life of cuisine and the implications this has for perceptions of the body that, arguably, is distinctly African. A comparison across the Eurasian landmass to Africa – in terms of the beginning of food domestication – shows some clear style patterns and boundaries in cuisine (Figures 7.1 and 7.2). There are two areas in north-central Sahara and northeastern Asia (China and Japan) where pottery develops as part of a boiling or steaming cooking regime to produce soft paste foods from wild millets or sorghum (in African), and rice in parts of East Asia (Figure 7.3). The development of a boiling and grinding food technology is based on wild grains, and originates as part of an indigenous epi-Palaeolithic indigenous hunter-gatherer regime from the tenth to ninth millennia BC in the northern savannas/Sahel, whilst domesticated plants spread into these parts of Africa only by the fourth millennium BC or later. Plausibly distinct was a tropical cooking complex based on yams and other tubers and tree nuts in the tropical forest zones of western Africa – a zone of origin inferred biogeographically but not yet evident archaeologically (Fuller and Hildebrand 2013), but nevertheless indicated in historical linguistics as preceding the advent of millets in this region (see, e.g., Bostoen 2014). African food systems, based on wet foods, can be seen in terms of two broad traditions, the boiling of grains into porridge and fermentation to beers (also discussed by Haaland 2006), and a forest tradition focused on tuber pastes and fermented flours. The grain-porridge tradition can



7.2. The geography of three important early cooking and ritual spreads in the Old World, including (1) cereal domestication zones in the Sahel-Sahara boiling zones and the later Bantoid/Bantu spread of porridge traditions (as per Ricquier and Boeston 2011); (2) the early West Eurasian spread of ovens, breading making, wheat, and associated sacrifice traditions; (3) the eastern Eurasian spread of ceramics for boiling/steaming of whole grains and associated ancestral cult and feasting traditions (image by DQF).

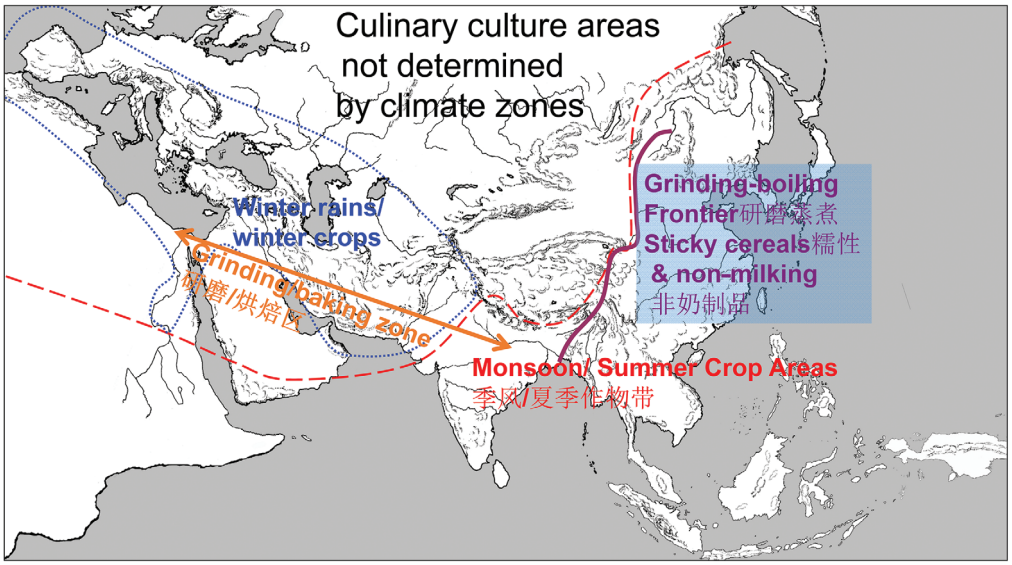


7.3. A map summarising the early zones of rice and millet agriculture in Asia, overlaid with key frontiers of food preferences, including the frontier between dairy production and nonmilking (after Simoons 1970), and the zone cultivation sticky (waxy) forms of cereals including rice and millets. Also indicated are some of the proposed epicentres for the origins of sticky Panicum miliaceum (blue star), sticky Setaria italica (three origins indicated by Roman numerals), and rice (concentric circles). Based on Rowlands and Fuller 2009.



7.4. A map of the roasting versus boiling zones of Mesopotamia and the Saharan/Nubia, with dashed lines indicating the approximate timing for the spread of domesticated wheats or barley (after Wengrow 2010). By permission of Oxford University Press.

be inferred to relate to early ceramics throughout the southern Sahara from west to east by 8,000–9,000 years ago, with establishment of cultivation-based food production in this tradition by about 5,000 years ago in both the far west (with domestication of pearl millet: see Manning and Fuller 2014) and in the eastern Sudan (with sorghum, see Fuller 2014). In sub-Saharan West Africa this millet-porridge tradition merged with the forest tuber paste traditions prior to the Bantu expansion, that is by about 3,000 years ago, as indicated by a rich Bantu vocabulary to do with porridge and stiff porridges, as well as shared yam terminologies (Riquer and Bostoen 2011). As Haaland has shown, this pattern spreads throughout Eastern and Southern Africa with the Bantu migrations but does not extend further north than a boundary roughly along the frontier between Nubia and the Upper Nile Valley (Figure 7.4; Haaland 2006). Instead, by the same period, there is a marked contrast between the sub-Saharan pattern of porridges and beer and the roasting and baking food systems of North Africa extending throughout the Mediterranean and through the Middle East to Northwest India and Central Asia with a central focus on the oven for baking and the roasting of meat associated with sacrifice (Figure 7.2; Fuller and Rowlands 2011).



7.5. A map comparing the distribution of culinary zones and major ecological/climatic frontiers. Grinding the bread traditions extend across the frontier on monsoon rainfall, whereas grinding, boiling, and sticking cereals remains east Assam/Bangladesh, which is not major ecological barrier (image by DQF).

What the archaeological and ethnographical patterns indicate is that there have been long-term stable cultural boundaries in the everyday materiality of cuisine extending over millennia in which the cultural technologies of food systems are part of much larger material cosmologies. For example, in East and Southeast Asia, techniques of boiling and steaming are crucial for the use of bamboos and rattans in house building/basketry and all forms of containers and serving of foods (Figure 7.5). This relates to the observations of Adams (1977) that fermentation (which comes after boiling) is a recurrent style of processing, not just food, but materials for craft and even the dead in some Southeast Asian traditions. We have previously outlined how Chinese systems of kinship and ancestry veneration were mediated by shared foods, simmered wine, and an understanding of substances that passed between the generations and shared in commensal groups, with elements of this evident in practices from the Neolithic funerals through to modern practices (Fuller and Rowlands 2011; Rowlands and Fuller 2009). In Africa, distinction in food types and cooking technologies are embedded in linguistic distinctions in all the Bantu and semi-Bantu languages (Nyamnjoh and Rowlands 2013). Most African languages and all the Bantu ones make a lexical distinction between different types of eating. In particular, distinctions are made between the swallowing of soft, ground food and eating that involves chewing or tearing food. In Mankon and the 'Ngemba speaking' (Western Bantu borderland) region of the Grassfields in Cameroon, for example, the two words are *dzie*

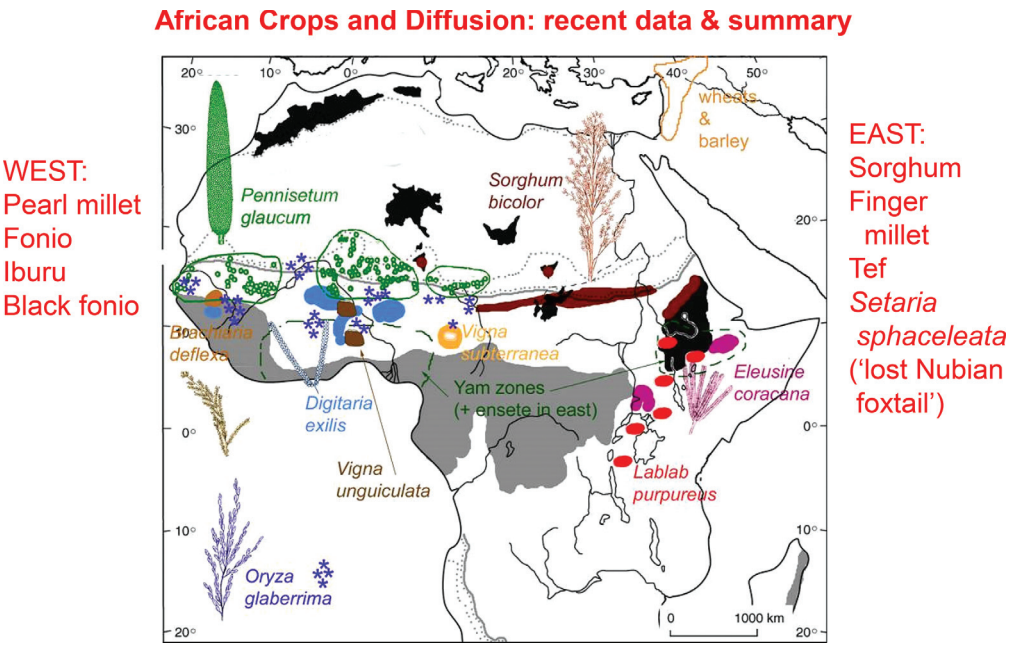
and *kfuru*. The emotional connotations are quite different. *Dzie* is 'good eating' and focuses on ground millet or, now, more likely corn or yams, taro, or cassava ground into a paste that, with a palm oil sauce, is nourishing and unifying. It implies a sense of well-being gained from sharing and eating food together, good words being said, and occurs at events promoting social harmony and the resolution of conflict. The successor to the title of a dead elder, for instance, is described, at his installation as one who 'eats the house' (*dzie nda*), that is restores its unity. *Kefuru*, on the contrary, is perceived as potentially harmful and dangerous: The focus is on the teeth and the act of tearing apart, for instance, when people eat meat, or show their teeth during acts of extravagant consumption. A commensality of bad nocturnal cannibalism is opposed to the good diurnal commensality and the sharing of ground, soft, mixed vegetable food that can be swallowed in a lump (Nyamnjoh and Rowlands 2013). *Kfuru* is widely associated with witchcraft where the emphasis is on the destructive consumption of the lives of others, usually often referred to by witches metaphorically as 'goats' or 'fowls.' The act of ingesting or swallowing food in much of Africa is, therefore, certainly more complicated than it might seem. In most African languages, there are distinctions made between two types of eating, two types of masticating and swallowing food, and two images (at least) of the parts of the body involved. There are also several different ideas of personhood and moral agency involved. As a civilisational cosmology, we suggest that all of this can be traced back to the Paleolithic as the origins of a basic template to which transformations and additions of plants, tree products, and domesticated animals have been creatively incorporated.

LONG-TERM FLOWS AND CONNNECTIVITIES

In his perspective on civilisation, Mauss (2006) stressed the need to retain diffusionist ideas of cultural spread and innovation. He argued that this would force us to analyse *mixtures*, but not in the ways that cultural diffusionists of the time distinguished the contiguity of cultures. Instead, he emphasised the spread of civilisations and how they encounter each other.

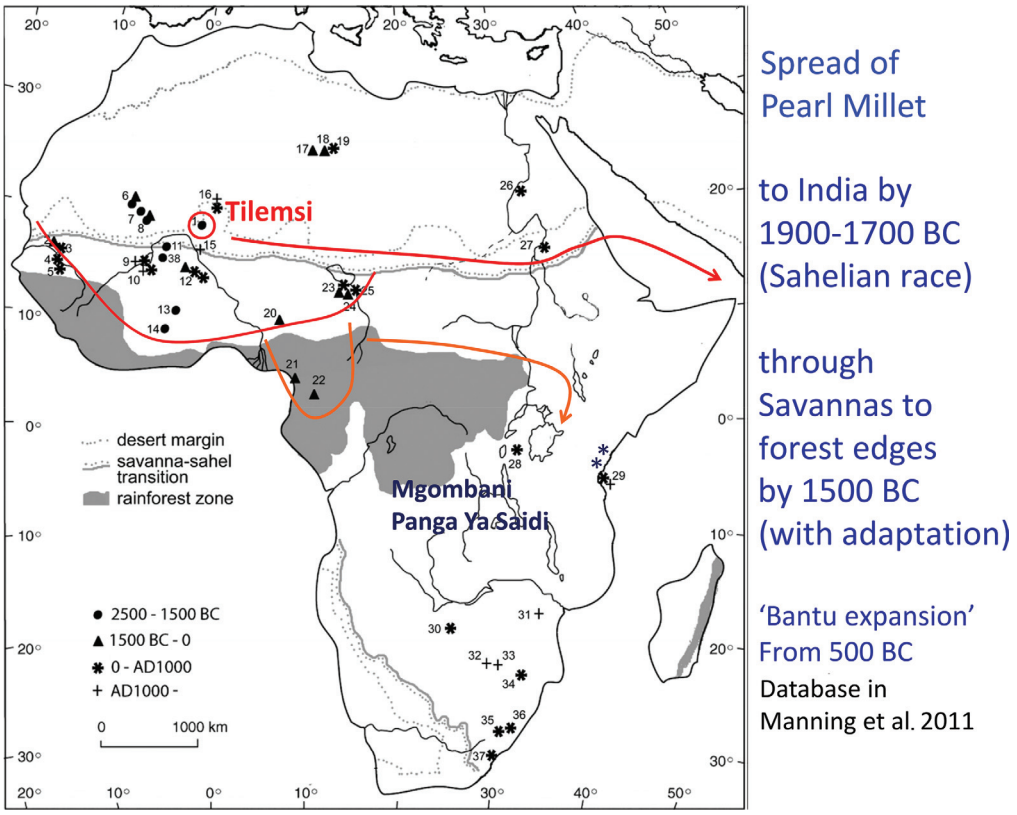
> The history of civilisation, from the point of view that concerns us, is the history of the circulation between societies of the various goods and achievements of each … Societies live by borrowing from each other, but they define themselves rather by the refusal of borrowing than by its acceptance. (Mauss 2006: 44)

In this regard the early long-distance flows of cultural materials are important, such as those across the Indian Ocean between Africa and Asia. The connections between Africa and India took place around the end of the third millennium BC, connecting across the northwestern part of the Indian



7.6. A map of major crop domestication areas in Africa (image by DQF).

Ocean through the integration of hitherto separate trading systems of the Persian-Arabian Gulf and the Red Sea Gulf of Aden (Boivin and Fuller 2009; Fuller et al. 2011: 545). Trade in obsidian connects northern Ethiopian and Yemen by the sixth millennium BC (Khalidi 2009), and expanded through time to include export for southern Red Sea obsidian into Egypt by the fourth millennium BC (Zairns 1990). Such trade is argued to lay the foundation for and to provide a more durable marker for trade in incense, that is myrrh and frankincense, that was sourced in the southern Red Sea lands, but central to royal temple cults in Egypt since the Predynastic period (Boivin and Fuller 2009). At about the same time, from the sixth millennium BC, Mesopotamian Ubaid ceramics and bitumen beads found on sites in eastern Arabia highlight the operation of Persian Gulf seafaring (Carter 2006), which ultimately underpinned the later third millennium BC trade between Mesopotamian cities and those of the Indus Valley (Boivin and Fuller 2009). From about 2,000 BC, these two maritime exchange zones seem to become linked, east and west around the southern coasts of Arabia. This provides the route for the spread of several major crops of African origins (sorghum, pearl millet, hyacinth bean) to the drier regions of western and central India (Figure 7.6; cf. Boivin and Fuller 2009; Fuller and Boivin 2009). Millets originating as domesticates in the Sahel region of West Africa were transmitted west to east along the Sahelian corridors by the end of the third millennium BC (Figure 7.7). They became



7.7. A distribution map of archaeological finds of pearl millet through African (after Manning et al. 2011), with lines and arrows indicating stages and directions of dispersal. Marginal annotation indicates key landmarks in the dispersal process.

available on the northeastern African coasts and were taken as food by the fishing and sailing crews of the boats plying a coastal trade to the Red Sea, Gujarat, and the coast of Western India. The connections from West Africa to India by the early second millennium BC were, therefore, already established many centuries before this time (Figure 7.5).

However, these movements of goods took place through an extended Gulf-India exchange network of small-scale societies. 'This transfer took place primarily between north-east Africa and/or Yemen and western India, probably outside of the context of the Bronze Age trade between major civilisations' (Fuller et al. 2011: 547). What is also clear is that the aim of the trade and movements of people, boats, and goods were not about accessing food and calories per se. The recipient societies in western India had well-established indigenous millet agriculture and African species would not become major staples for a millennium or two (Boivin et al. 2014; Cooke and Fuller 2015).

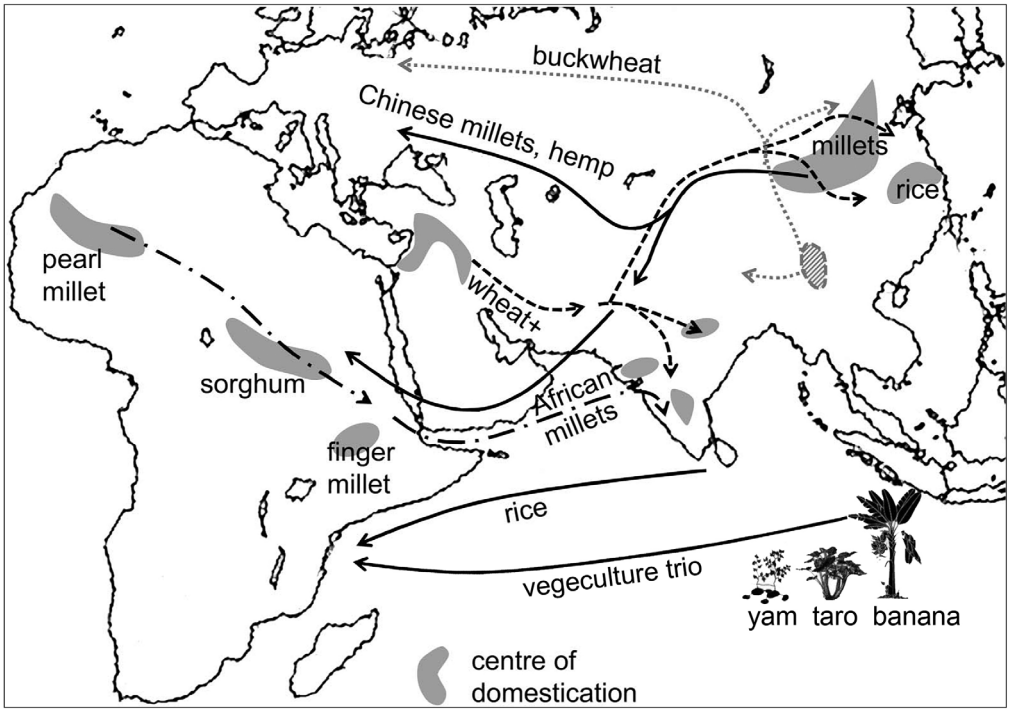
Instead it is likely that these early networks moved high-value substances, such as incenses and medicinal plants. Some grains may have simply been leftover

food after such voyages, but it is also plausible that foodstuffs were moved for perceived medicinal or apotropaic properties, much as rice in the Roman world or early Medieval Europe was perceived to be a medicinal food for the sick rather than a staple food (Decker 2009). Indeed, grains moved long distances may have at first been valued as exotics only later shifting into the category of potentially staples after they had been adopted into local cultivation and culinary systems (Boivin et al. 2012, 2014). By virtue of their movement over long distances they may well have gained a perception of power in the exotic.

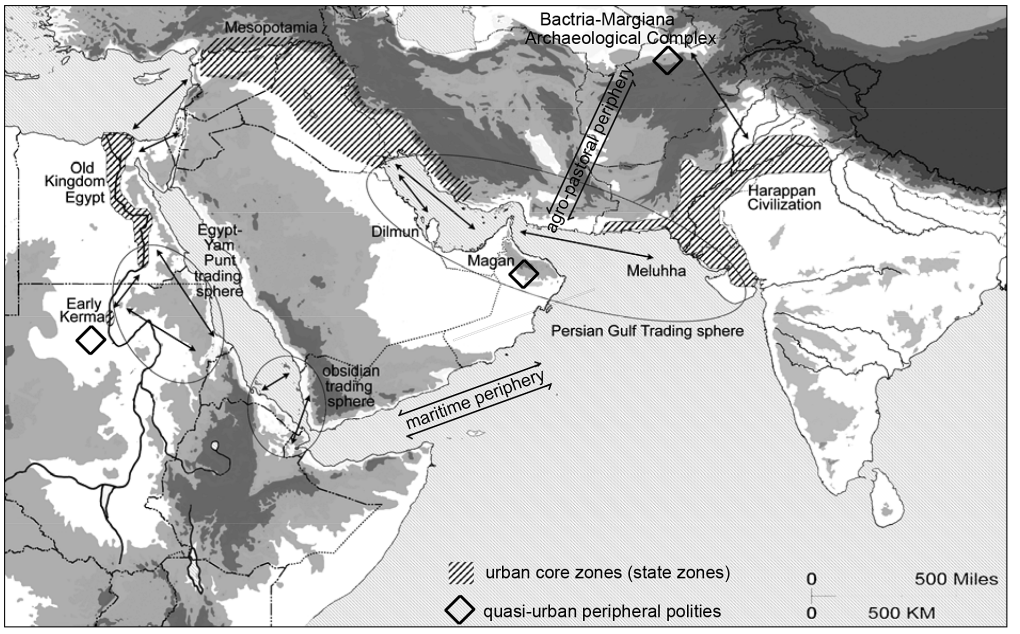
Therefore, trade on which these movements of plants was based lay in distributing ritual substances that later became more well known in Ancient Egypt and Mesopotamia as vital substances to service the deities at the ritual banquets of city gods and the staff of the temples or palaces of Bronze Age urban centres. The creation of an Arabian Sea corridor between Africa and India was, therefore, very likely stimulated by the demand for incense (in particular, frankincense and myrrh) and was the precursor of the later pepper route of the spice trade.

As Boivin and Fuller summarise the situation, the first signs of the spread of pepper that originate in the wet forests of southern India come from the finding of black pepper corns used to fragrance the mummy of pharaoh Ramesses II (ca. 1200 BC). At first, the links between Africa, the Gulf, and India are limited to the Arabian Sea, but in the next millennia, systematic links are made across the Indian Ocean. This is clear in the later first millennium CE when Swahili culture in southeastern Africa begins to incorporate tropical Asian crops (Boivin et al. 2014). But it may start earlier with postulated Southeast Asian starchy cultivars that were brought to the moist tropical zones of central and West Africa (i.e., bananas, plantains, taro, and large yam complex) (Figure 7.8). Roger Blench has also argued recently that the spread of banana/plantain, taro, and yam complex from New Guinea into Southeast Asia and a return spread of bamboos and rattans into island Melanesia occurs before the spread of domesticated rice and the Austro-Polynesian expansion associated with the Lapita horizon (Blench 2009, 2010; Blench pers. com.).

In a world systems perspective, these interactions and 'trade routes' between Africa, the Gulf Region, and India by the end of the third or early second millennium BC would be seen as either periphery or semiperiphery to the urban centres of Mesopotamia and Egypt. But this would be the wrong perspective. There is increasing evidence of the independence of these networks. Their origin does not require any prior involvement in trade with the urban Bronze Age centres of Southern Mesopotamia (Figure 7.9). As Boivin and Fuller (2009) argue, there were attempts to intervene and control these sources of vital ritual substances, like Queen Hatshepsut's expedition to the land of Punt and military expeditions from some of the Southern Mesopotamian city-states, which replicated the expansion to control trade routes to Northern Syria and Anatolia. In other words, although obviously different in scale, such



7.8. Example of major long-distance crop translocations in the ancient Old World, and including terrestrial and Indian Ocean routes (modified map elements from Boivin et al. 2012 and Fuller and Boivin 2009).



7.9. Early Bronze Age trading spheres (third millennium BC), indicating the well-studied trade between urban state zone cores such as Egypt, Mesopotamia, Indus (after Boivin and Fuller 2009), as well as some other trading spheres with peripheries with emergent urban polities and nonurban, mobile societies of substance exchanges, notably in the Arabian Sea and via the hilly interior of Middle Asia.

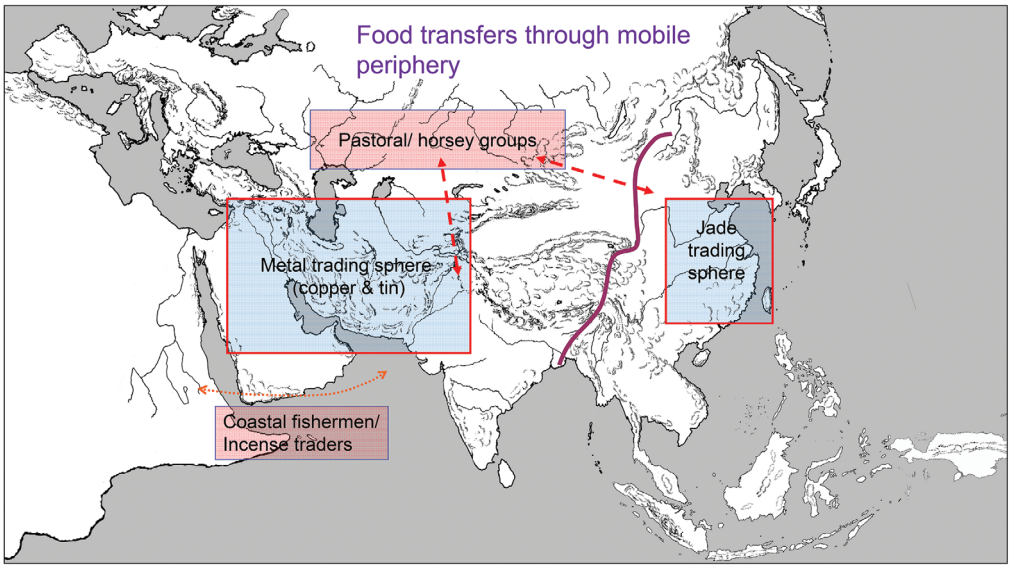
attempts were rather like later secularised Portuguese, Dutch, English, or French interventions in the Indian Ocean trade, all of which had to use force to break into already established and historically well-developed, Arab-dominated trading networks. It requires another perspective to know exactly how what appears to be long-distance exchanges between small-scale agro-pastoral societies in the African Sahel linked to fishing/seafaring communities on the Arabian Sea coasts and hunter-gatherer communities on the West Indian coasts would encourage commitment to long-distance movements and transport of probably highly valued ritual and exotic substances and their preservation outside of any complex urban-based mercantile systems. In other words, the Africa-India and Southeast Asia corridors – including both earlier coastal and, later, direct trans-Indian Ocean routes that brought the island Southeast Asian products (plantains, bananas, taro, and chickens) and Austronesian speakers to the East African coast and Madagascar – were 'Neolithic' and self-contained rather than a peripheral product of Bronze Age urban systems.

If the Africa to Indian Ocean pattern in the third to second millennia is considered in a wider Eurasian context, it can be seen that autonomous development is not unique but within a 'Bronze Age' milieu. The Central Asian Steppes extending to the Caucasus in the Early Bronze Age have now been reinterpreted in terms of autonomous development of bronze metalworking, the domesticated horse, and wheeled transport in the form of chariots in particular (Anthony 2007). The question of the relations between Central Asia and Mesopotamia and China is explored in terms of the transmission of pastoralism, metallurgy, and the development of the Silk Road (Frachetti 2012; Figure 7.10). However, this connection suggests a different situation to that found for sub-Saharan Africa and the Indian Ocean, due to the fact that their autonomous development is linked to commercial trading systems, while their autonomy becomes a problem leading to reorganisation of trade in these 'core regions' and later to the pattern of violence to intervene and control, leading to the formation of later empires.

Thus, the questions remain: What is different about these zones that in terms of flows and connectivity by the mid-first millennium BC show common linkages in transfers of food items, spices, and ritual substances, and yet in their nonurban, civilisational status have been relegated to the periphery in global histories? What is different in their being 'stuck in the Neolithic,' and what drives the movement of people and things in the absence of a clear mercantile abstract logic of profit-oriented trade?

EXPANSION AND RITUAL INTEGRATION

From the perspective of the temple economies of Ancient Egypt and Mesopotamia, the 'south' – meaning broadly Yemen, Oman, and the Somali



7.10. Schematic of different zones of cultural values and trade in Bronze Age Eurasia highlight the roll of the 'peripheries' of mobile pastoral/coastal societies in crop translocation.

coast – was the source of important tree resins, in particular frankincense and myrrh, derived from trees growing in the Horn of Africa and South Arabia. As incense, these resins were used as part of sacrificial offerings to deities in temple rituals that originated as part of roasting and baking traditions in the Neolithic societies (if not earlier) of west Eurasia from the Indus to the Mediterranean. Oils, perfumes, and incense were combined with the roasting of meat as sacrificial foods made for deities (Fuller and Rowlands 2011). In their discussion of ancient Greek sacrifice, Vernant and Detienne emphasised the role of pouring incense and oils on roasted meat to produce the odors and smoke that would attract the attention of transcendent deities (Detienne and Vernant 1989). Offerings of myrrh, frankincense, and possibly obsidian for hair removal were critical components in Ancient Egyptian funeral rituals both for the preservation of the dead and in the transmission of the spirit of the dead to an afterlife (Wengrow 2006: 147). As has been seen, the supply of pepper from South India to Egypt, witnessed in the funerary rite of Ramesses II, is already part of this ritual exchange by 1200 BC, and the early trade of copal from the East African Coast to Western Asia is suggested by the identification of it as a substance on a pendant in a third millennium BC Mesopotamian grave from Eshnunna (Tel Asmar near modern Baghdad). Although this early date may need to be viewed with some caution, a pre-Islamic trade in copal from East Africa to the Middle East is more certain (Crowther et al. 2015). In fact, the idea of ritual substances from the periphery as a key feature in the nature of Bronze Age value has long been emphasised with the circulation of

amber from the Baltic to the Mediterranean, and presumably many parts of the Middle East as well as Egypt. As Kristiansen notes, amber was craved in the Eastern Mediterranean in the Bronze Age; however, little is known about how or why it was used except perhaps in connection with healing or curing or talismanic protection (Kristiansen and Suchowska-Ducka 2015: 362). What all these substances share in common is a lack of use in their areas of origin. In the case of Baltic amber, whilst it was found in late Neolithic graves in Scandinavia, it disappears from graves during the Nordic Bronze Age (Ling and Rowlands 2013). Further afield, incense, coming from Southeast Asia, wafted through the T'ang Emperor's court. Before opening the business of the court, a 'table of aromatics' would be placed before the Son of Heaven and here 'the great councillors of state stood before the table and, perfused with the magical fragrance, proceeded to conduct the business of state' (Schafer 1963: 155–156 quoted in Sahlins 2008: 191). Such dependence on aromatics for the efficacy of Bronze Age state rituals, indicated that this access to the unguents, spices, and oils from the 'south' was important, as these were more than 'luxuries' or exotica, nor were they easily substituted by alternative substances from regions more controllable through commerce and violence. In other words, whilst a good case has been made recently for the embedding of trade for profit as part of the temple economies of western Eurasia, it is the exclusion of Africa and its connections with Southern India to Island South East Asia, quite separate from the profit-making logic of these Bronze Age trade networks, that should be emphasised (e.g., Boivin and Fuller 2009). The absence of seals, common weight systems, and standard measures in Southern India indicates this region was removed from direct contact and influences of the Indus civilisation, which in turn suggests that the value attributed to these 'southern' substances was not a matter of quantitative assessment or the integrity of the contents of trade packages, but a more Appadurai-like form of exchange value (Appadurai 1985). A 'Neolithic' value of ritual integrity preserving the authenticity of substances, in turn, seems to have depended on maintaining a certain 'mystery' about their origins. It is quite striking that the idea of remoteness and distance as a ritual value would be supported by the mysteries of exchange (e.g., as emphasised by Mary Helms 1988). Such 'mystery' in the origins of sanctity would also be antithetical to attempts to intervene and control by force the source of life-giving substances, at least until the violent expansion of European colonising powers appeared on the scene. A contrast is drawn between this and a commercial logic of branding, profit, and accumulation in Bronze Age contexts (Wengrow 2008) as a precedent creating the necessary conditions for expansion through violence leading to early states and empires (Wengrow 2010). A 'Neolithic logic,' in the sense of Levi Strauss's 'science of the concrete,' is in fact based on quite opposite cosmo-politics, and simply dissolves and disappears in the face of extreme violence. Bronze Age reproduction of state power based on

unequal exchange, enforcement of property rights, and support by violence, depended not simply on ignoring the world of the 'south,' but on sustaining and preserving its Neolithic value to ensure the independence of their means of ritual reproduction.

In his materialist critique of Levi-Strauss, Jack Goody gives us another part of the answer for the uniqueness of Africa. He has consistently compared the kinship and marriage patterns of Eurasia as based on endogamy rules, in contrast to exogamy rules in Africa (Goody 1983). In fact, this dichotomy is not so clear cut, and he has been criticised (see, e.g., Hann 2008; Yanagisako 1979). However, the broad difference he wants to make links marriage and inheritance throughout Eurasia, in particular, to the control of scarce property and ownership of land.

To keep control of limited resources, in particular land, kin groups in Eurasia, he argues, frequently pass on property through both sexes, a practice (basically a dowry system) that Goody called 'divergent devolution.' In Africa, by contrast, where land historically was plentiful, it was control over people and their reproductive potential that was always more important. Low population densities, for Goody, meant there was no need for the control of labour on land creating the means of inequality. By contrast, he emphasised that African kinship systems focused on the transmission of rights in people and, in particular, their offspring, while Crow/Omaha kinship was directed to alternative generational exogamous marriage ties preventing taking a wife from the same group as the mother (Rowlands 1980). In a world where land was not bounded into estates, and elaborate bureaucracies and complex divisions of labour were not developed, people could be mobile and adopt different forms and manifest themselves differently according to context and necessity. Certainly, the concern with how best to conceive subjects, objects, and the relationship between them has been very much at the surface of the ethnographic imagery that the study of sub-Saharan societies has generated: lineages and ancestor cults; secret male fraternities and their masquerades; drums of affliction; fetishes and blacksmiths; witchcraft substances; wealth in people; and admixtures of subjects and objects in things like drums, masks, beaded crowns, and raffia cloths. A 'Bronze Age' gaze that insists on the universalism of a particular formation of personhood is contradicted by the presence of a 'logic of the concrete.' In more animistic settings, it is objects that realise their innate subjectivity in ritual practice rather than merely representing an externally derived subjectivity. The fact that such dramas of the object were still potent in the Bronze Age ritual of the person – including the ideals of warrior success and animism, as in the widely recognised ritual power of swords and protective armour – suggest that no great drama of rupture took place between Neolithic and Bronze Age cosmologies in Eurasia. It would be best not to insist on rupture but rather to

inquire into the longevity of Neolithic ideals well into the Bronze Age and later, potentially, to the present.

CONCLUSION

Our main aim in the chapter has been to complexify the nature of global histories that draw upon the idioms of Bronze Age civilisation and urbanism. Clearly, the scale involved with states and empires is significant, but perhaps it is worth pointing to the fact that, like industrialisation in Europe, urban civilisation from the Bronze Age may have developed as a contingency to some other concerns that were elsewhere and involved none of these attributes precisely because 'elsewhere' they had better control of nurturing the conditions of life.

Instead, using Mauss's development of a concept of civilisation has a more transcendent value, as it encompasses and exists prior to the generation of what sociologically may be described as societies or states. When applied to the prehistory of much of sub-Saharan Africa and connections to the larger Indian Ocean world, not only a larger civilisational cosmology can be identified but also practices that maintain quite distinct ontological politics from the Bronze Age and its subsequent legacies in terms of states and empires.

If we move our gaze forward to a more contemporary setting, being 'stuck in the Neolithic' may well be the basis for understanding the contemporary realities not only of Africa, but many other parts of the 'south.' Whilst colonial rule imposed forms of governance and authority consistent with the nature of the state developed in the West, it by no means guaranteed that these are the forms of 'governance' that will eventually re-emerge based on what many pan-Africanist leaders at different times of independence in Africa have believed would be the rediscovery of more authentic African ways of exercising power and legitimacy. Such indigenous forms of knowledge may well be what will be valued in any future resolution of the contradictions of living in the age of the 'Anthropocene'/'Capitalocene.'

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EIGHT

MARGINALIZING CIVILIZATION: THE PHOENICIAN REDEFINITION OF POWER CIRCA 1300–800 BC

Christopher M. Monroe*

INTRODUCTION: WHERE IN HISTORY DO THE PHOENICIANS BELONG?

Phoenician historiography is a dubious endeavor, as marked by the frequent use of the words "enigmatic" or "elusive" whenever the subject is introduced. Over the past decade or more this view has changed enough to provoke new discussion while leaving all that follows as provisional. Specifically, the aim of this chapter is to rethink "Phoenician civilization" and its impact on complexity within the Mediterranean in the context of recent historiography and archaeological theory. One might start with a famous characterization of the population of the Mediterranean and Black Sea littorals in the fourth century BC:

> I believe that the earth is very large and that we who dwell between the pillars of Hercules and the river Phasis live in a small part of it about the sea, like ants or frogs about a pond, and that many other people live in many other such regions. (*Phaedo* 109a–b)

* Warm thanks to: the Cornell students in our 2011 seminar, *Archaeology of the Phoenicians*; the audience and respondents at the 2011 and 2012 ASOR annual meetings; and those participating in the 2012 Theoretical Archaeology Group conference. Above all, thanks to Kristian Kristiansen for inviting me to Gothenburg.

Plato's point was ecologically deterministic, claiming that a seemingly central area of human endeavor could hardly be an isolated phenomenon. It was also a chauvinistic and privileged perspective that for rhetorical purposes diminished what the Greeks perhaps did not want to admit they had inherited: a vast network of information and material exchanges built by others over centuries that facilitated the rise of Greek expansion and thus Athenian prominence.[1] One can only wonder what a Phoenician scribe, such as the legendary Sanchuniathon, might have written about the scope of civilization and trade at the end of the Bronze Age. Regardless, the later quote of Plato's contains the central dialectic that runs through much recent discussion of the Phoenician role in trade and civilization: Where does agency lie in the creation of the Mediterranean world, with humans or nature?

While Phoenician ambiguity is nothing new, a growing historiographical challenge is maintaining an inclusive discussion among scholars housed in classics, Mediterranean studies, ancient history, North Atlantic prehistory, biblical studies, Assyriology, anthropology, archaeometry, and the various cultural archaeologies of the Eastern, Central, and Western Mediterranean (and beyond). What seems to be luring so many scholars into a common pool is a resurgent interest in trade and how the theoretical prisms of heterarchy and middle grounds, rather than hierarchy and cores, illuminate processes of connectivity and identity negotiation, either for the Phoenicians or anyone with whom they came into contact.

The past decade has witnessed considerable interest in connectivity and identity as scholarly lenses for investigating early Mediterranean history, stimulated by ambitious works such as Horden and Purcell's *Corrupting Sea* (2000), Abulafia's *The Great Sea* (2011), and Broodbank's *The Making of the Middle Sea* (2013). Arguably, these are all ontologies aimed at redefining who or what created the Mediterranean world. Of interest here are the roles given in these and related synthetic works (e.g., Cunliffe 2008: 270–300; Kristiansen 1998: 124–160; Kristiansen and Larsson 2005) to civilization and trade. Horden and Purcell invoke Phoenicians as middlemen meeting needs and wants in an eventual, predictable response to received ecological and topographical contours; neither civilization nor trade figure as powerful actors. Abulafia's history, which places more emphasis on human agency and on the sea, has Phoenician merchants heroically integrating the Mediterranean into a single zone after a catastrophic regional collapse ca. 1200 BC. Yet, even within such a grand narrative, the Phoenicians remain within a Levantine comfort zone until they are forced to meet the demands of the Assyrian Empire. Phoenician agency is thus consigned to the margins of the civilizational core, a relatively passive role determined less by evidence than a model of hierarchical economic relations that privileges state actors that produce permanent written records. This bias limits the scope and possibilities for interpreting the laconic evidence

associated with Phoenician culture generally, and even more so concerning its expansion. If, by contrast, one considers the ambiguous and laconic evidence of Assyrian involvement in Mediterranean matters alongside the growing archaeological evidence of early Phoenician expansion, then a narrative more consistent with Broodbank's (2013: 359–505) necessarily emerges. Indeed, in its properly wide and maritime scope of inquiry, *The Middle Sea* grants due agency to the Mediterranean, to the Phoenicians, and importantly, to various local groups creatively interacting with Phoenicians. A richer history of trade, civilization, and things in between is thus achieved by largely leaving aside the Assyrian Empire. Just how far from Assyria the historical gaze can be averted is a key question addressed in the following text.[2]

This study is restricted to a roughly 500-year era that begins in the thirteenth century BC with the early expansion of Cypro-Phoenician materials as far as Sicily, progressing toward substantial contacts with the Atlantic Iberian coast by the tenth century and ending with intense western colonization in the eighth century. The subject is presented in three interdependent sections. First, a number of discoveries leading to earlier dates for the expansion just mentioned are reviewed. Secondly, this reality necessitates a critical reevaluation of the conventional explanation for Phoenician expansion, what will be termed the Assyrian Pressure Paradigm (henceforth APP).[3] Revising the APP to sequentially comply with current archaeological evidence suggests that something other than Assyrian imperial demand drove the expansion phenomenon.[4] This realization invites the third section, which considers theoretical approaches to understanding socioeconomic relations of Phoenician-indigenous contacts. Recent theoretical trends looking to augment world systems with more heterarchical models from network theory and the middle-ground concept from postcolonialism appear consistent with the ambiguous, laconic evidence, while simultaneously adding to a credible theoretical nexus for historical transformation. These trends contribute to a maritime and liminal perspective that results in seeing Phoenician civilization less as a projection of power (in territorial or hegemonic senses) and more as a negotiation among partners involved in creating new sources of wealth and identity in what had been the margins of Levantine and Near Eastern civilizations.

REVIEWING PHOENICIAN TEXTUAL EVIDENCE

Over the last century or more, the study of Phoenician expansion has evolved from being based mostly on unreliable texts interpreted in an archaeological vacuum to one where the archaeological evidence now outweighs the textual (Aubet 2013: 2; Katzenstein 1997: 3–4; Sagona 2008). This evidence reveals a longer and less centralized movement than is commonly hypothesized, with key achievements made in the eleventh through ninth centuries. And rather

than seeing markedly different stages in the overall expansion, current evidence suggests that a more gradual and networked process resulted in the settlement pattern of the intensely colonial eighth and seventh centuries.[5]

The first paradox of Phoenician history is that the legendary transmitters of literacy produced virtually no indigenous narrative of their own accomplishments. This central documentary problem runs deep and can only be mitigated – not solved – by recent discoveries. The lack of either an indigenous history per se or coherent concept of what is "Phoenician" in the construct "Phoenician history" are both recognized as issues in current textbooks on Phoenician history. For example, Aubet (2001) and Markoe (2000) both admirably document the overall distribution of Phoenician sites and descriptions of them, and their studies are augmented by Ann Neville's well-illustrated volume on contacts in Iberia (2007).

It is now axiomatic that the term "Phoenician" was an ethnonym applied by Homer and later Greeks to a group of Levantine city-kingdoms that were neither politically unified nor contained any citizens who would have self-identified as "Phoenician" (Aubet 2001: 6–7; Markoe 2000: 10; Sherratt 2005; Sommer 2010; van Dongen 2010; Winter 1995). The term is still only vaguely understood as deriving from a purple color precipitating from their famous dye industries. Despite its problems, "Phoenician" is retained in textbooks and scholarship as part of a tri-partite schema for distinguishing temporal horizons over a 5,000 or 6,000 year span. "Canaanite" typically applies to the Chalcolithic through Bronze Age, from 5000 to about 1200 BC, "Phoenician" for the years 1200 to 600 BC, and "Punic" for the period dominated by the rise and fall of Carthage, from 600 to 146 BC. Aubet and Markoe both emphasize cultural continuity throughout this range, and especially between the Canaanite and Phoenician eras. Thus, they consider archaeological and textual sources pertaining to Bronze Age Coastal Canaanite polities as relevant and a continuous antecedent to the conventionally named Phoenician phenomena that follow. In the Late Bronze Age, specifically the fourteenth through early twelfth centuries BC, Akkadian and Ugaritic texts inform us about regions called Kinahhu (or Canaan) and Amurru, which the Greeks later call Phoenicia. These texts have allowed Itamar Singer to construct political histories of Amurru (Singer 1991) and its northern neighbor, Ugarit (Singer 1999), in works that indicate that Phoenician history begins in the Bronze Age, despite the problem of third and earlier second millennium references being few and external (Aubet 2001: 18–21).

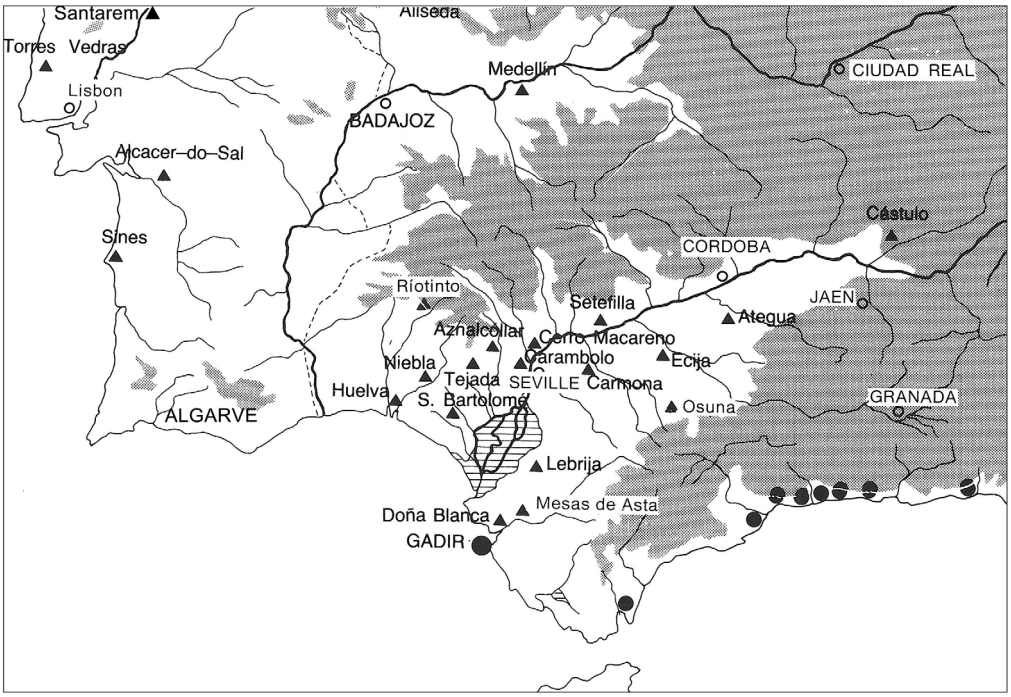
In the Early Iron Age, or twelfth century BC, the issue is not a complete lack of sources, although they are slim enough to remind us why this is still called a Dark Age (Aubet 2001: 29; van de Mieroop 2007: 199–206). Writing continued, albeit on papyrus, in Phoenician towns like Beirut that survived the regional collapse. According to Hellenistic sources such as Strabo, the

late twelfth century BC was a Phoenician "golden age," the time of historian Sanchuniathon of Beirut and the colonization of Gadir (Spain), Utica (Tunisia), and even Lixus in Morocco (Aubet 2001: 28). These twelfth-century foundations are routinely dismissed as Philhellenic attempts to invent a Mediterranean created by Greek heroes returning from the Trojan War (Aubet 2001: 196–197), while texts written in the Iron Age suggest Phoenician activities were limited to the Eastern Mediterranean littoral, including Cyprus. The best known is the eleventh-century BC Egyptian "Tale of Wenamun," an official sent overseas to obtain cedar from Byblos, and through trials and tribulations ends up on Cyprus before the report breaks off, his future uncertain. Typically, the tale is read as evidence of Egypt's lost empire and Iron Age entrepreneurialism replacing Bronze Age command economics (Liverani 1987: 72; Markoe 2000: 27–28; Sherratt 2003: 52). One may also read it as a naïve official's discovery that dealings with Byblos had always been somewhat commercial. Tjeker-Baal's response to Wenamun's argument that Byblos had always filled Egypt's orders is typically ambiguous:

> True, they did it. If you pay me for doing it, I will do it. My relations carried out this business after Pharaoh had sent six ships laden with the goods of Egypt … He had the daybook of his forefathers brought and had it read before me. They found entered in his book a thousand deben of silver and all sorts of things. (2, 10) He said to me: "If the ruler of Egypt were the lord of what is mine and I were his servant, he would not have sent silver and gold to say: 'Carry out the business of Amun.' It was not a royal gift that they gave to my father! I too, I am not your servant, nor am I the servant of him who sent you!" (Lichtheim 1976: 226)

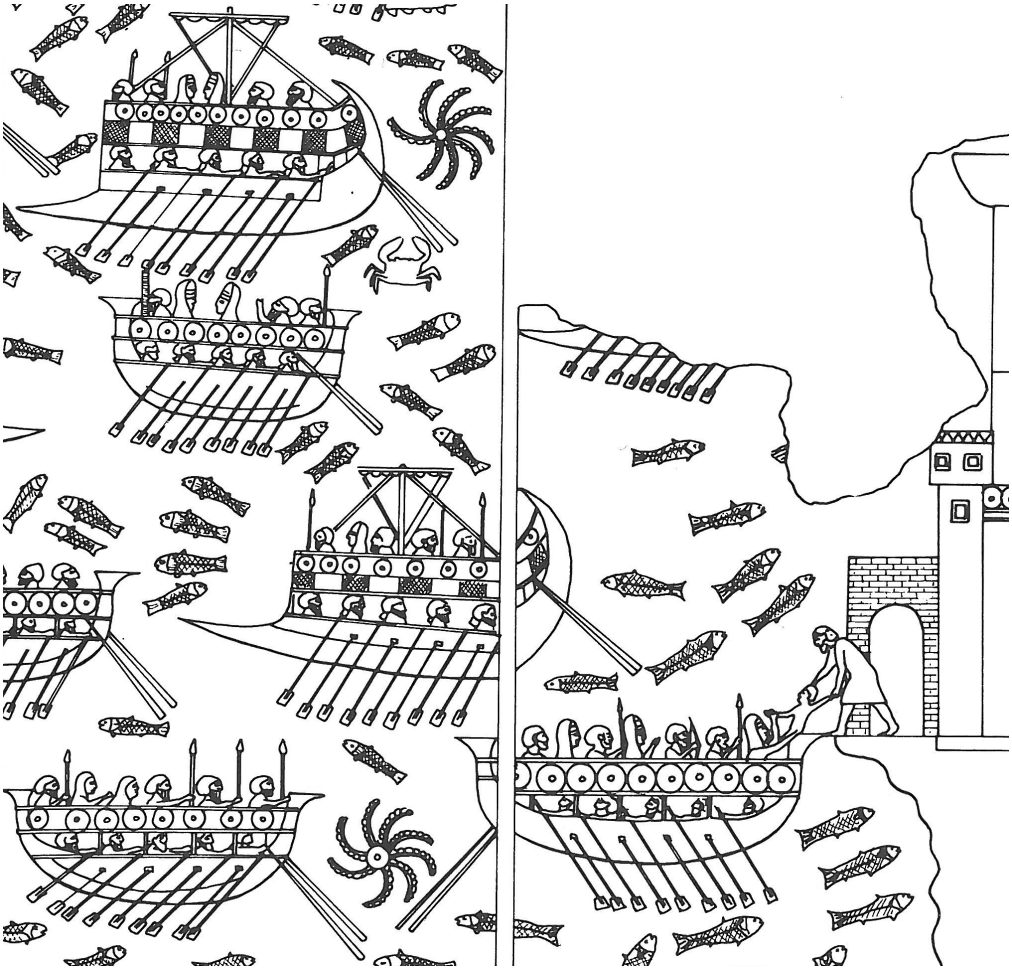
Because we lack any similar, antecedent text, it should be used more cautiously in drawing epochal economic contrasts than it has been.

Another problem with twelfth-century BC historiography is the frequent overreliance on the so-called Annals of Tyre, which claim for example that Tyre was founded by its neighbor Sidon in 1191 BC, despite Herodotus 2.44 having reported that Tyre was founded 2,300 years prior to his own time or ca. 2750 BC. The Annals of Tyre reach us indirectly and fragmentarily through Josephus of the first century CE (*Ant.* 8.62), whereas both the fourteenth-century Amarna Letters (EA 148–152) and thirteenth-century correspondence from Ugarit (RS 18.031= *KTU* 2.38; RS varia 25) concern dealings with Tyre (Monroe 2009a: 98–99, 139–140). Add to this the twenty-seven strata starting in the Early Bronze Age at 2800 BC that Patricia Bikai's excavations at Tyre uncovered (1978: 72) and one has a clear win for Herodotus on this account. While the Annals of Tyre are indispensable for corroborating biblical and Assyrian attestations, they reify a misleading notion that Phoenician history starts with Iron Age Tyre.



8.1. Phoenician presence in Huelva, Tartessos, and Iberian environs (after Aubet 2001, fig. 62).

The Assyrians thankfully still wrote their annals on clay in the Iron Age, and it is possible to chart their evolving relationship with Phoenicia starting in the late twelfth century when Tiglath-Pileser I (1114–1076) records taking cedar and other tribute from Byblos, Sidon, and Arvad (Grayson 1991: 35–38), policies that continued under Assur-bel-kala (1073–1056; Grayson 1991: 99–105). Aubet (2001: 54–55) and Markoe (2000: 37, 98) describe this phase of Assyrian-Phoenician relations as benign and mutually beneficial. This textbook view of a laissez-faire attitude toward the coast lasting from the twelfth until the onerous ninth and invasive eighth centuries BC comes from a consensus among Assyriologists that became part of Phoenician historiography in 1979 when Susan Frankenstein linked a powerful new sociological construct, the world system, to contemporaneous Assyrian texts and an emphatic pattern of Phoenician sites lining the Andalusian coast (Figure 8.1; see Bierling and Gitin 2002 for summary of discoveries from the 1960s and since). In clear Marxist terms, she characterized the supposedly aristocratic Phoenician merchants as marginal middlemen, "parasitical to the demands of the major empires that have dominated the history of the Near East" (Frankenstein 1979: 263). In Markoe's (2000: 98) take on this theory, the Assyrian economic role begins as a kind of market demand. To Aubet (2001: 93), Assyrian tribute was burdensome but "not a problem" for Phoenicia until the later eighth century when



8.2. King Luli and company fleeing Tyre, ca. 690 BC, in relief from palace of Sennacherib (after Aubet 2001, fig. 14).

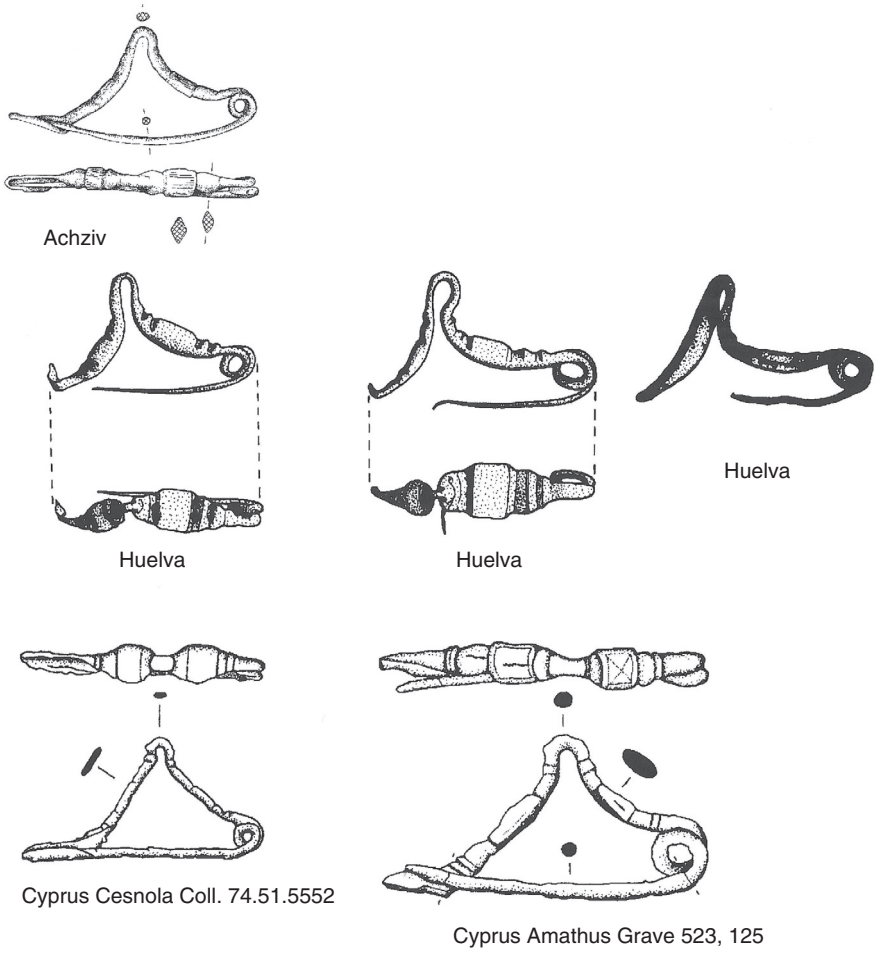
Tiglath-pileser III imposed a gigantic tribute (150 talents of gold) on Tyre, as well as port inspectors and tax collectors, and thus converted the city, in her words, into an "instrument of *Assyrian* expansion" (Aubet 2001: 54–55). Such policies led to rebellion and ultimately to the flight of King Luli to Cyprus in 701, famously illustrated in relief at Khorsabad (Figure 8.2). Under Esarhaddon (680–669), a treaty with Baal of Tyre claimed salvage rights and control over Phoenician ports from Dor to Byblos. Thus, a pattern of increasingly hostile relations would appear to explain the Phoenician colonization of Andalusia that is archaeologically the most definitive in the eighth and seventh centuries BC. Since Aubet's magisterial work (2001, first English edition in 1993), which liberally applied Frankenstein's world-system model, the view has become paradigmatic (e.g., Gitin 1997, where Andalusia is the Assyrian periphery) and thus finds its way into Abulafia's *Great Sea*.

The gap between the eighth-century Phoenician presence in the West and the supposedly tenth-century BC naval exploits of Hiram and Solomon has until recently been another sticky problem for Phoenician historiographers, who have tended to grant the biblical accounts of David and Solomon more historicity than most Assyriologists or Bible scholars would. Thus, the shipping network connecting Tyre with Tarshish has often been explained away as an *eastern* or Red Sea network, despite the circuitous and selective logic required to see it thus (for a concise summary of this scholarship, see Beitzel 2010: 37). The Hebrew Bible clearly records how Hiram of Tyre helped establish kingship in Jerusalem by supplying David and Solomon with cedar, carpenters, and masons (2 Sam. 5:11, 1 Kings 14:1, 1 Chron. 14:1, 2 Chron. 9: 21). The correspondence between Hiram and Solomon closely resembles Late Bronze Age royal correspondence and is repeated verbatim by Josephus, who claims to have access to a Phoenician history written by Menander.[6] Hiram furnishes sailors for Solomon's navy in a joint venture to Ophir (1 Kings 9:26, somewhere around the Horn of Africa); and Solomon and Hiram's Ships of Tarshish took three years to come back bearing "gold, silver … ivory, apes, and peacocks" (1 Kings 10: 22).

This and other biblical testimony, such as Ezekiel's "Lament for Tyre" (Ez. 26–28), have long been regarded as economic history (Faust and Weiss 2011: 192; Liverani 1991; Markoe 2000: 34). Hiram gained access to Red Sea routes and Solomon's fields and orchards and thus, the full range of wealth and staple finances; Israel got its temple built and palace refurbished in a manner appropriate to Near Eastern kings, as well as access to Mediterranean and African trade. On the recurring phrase, "ships of Tarshish," Lipinski's philological and archaeological exegesis is the fullest, summarized in his 2004 *Itineraria Phoenicia* and only briefly here. Tarshish was a real area, known to Herodotus as Tartessos, not far from the Pillars of Herakles and ancient Gadir. Lipinski narrows the identification down to the port town of Huelva, noting that at times Tartessos was either the town, the region, or both (Figure 8.1). Having no corroboration for trade between Hiram and Tartessos in the tenth century BC, Lipinski proposed that Tarshish was a literary trope referring to the most distant place imaginable by a fifth-century BC author – where else should Jonah go but the Pillars of Herakles? And Ezekiel's Lament for Tyre is all the more ironic when Tarshish is understood as being at the opposite end of the Mediterranean world. Like Herodotus, the biblical authors were aware of Tartessos, although its meaning was already supposedly forgotten by Septuagint translators. But what happens to Lipinski's explanation if archaeological evidence pushes Phoenician-Tartessian contact back into the tenth century? Tarshish then becomes a correctly remembered toponym, and legend and history begin to converge.

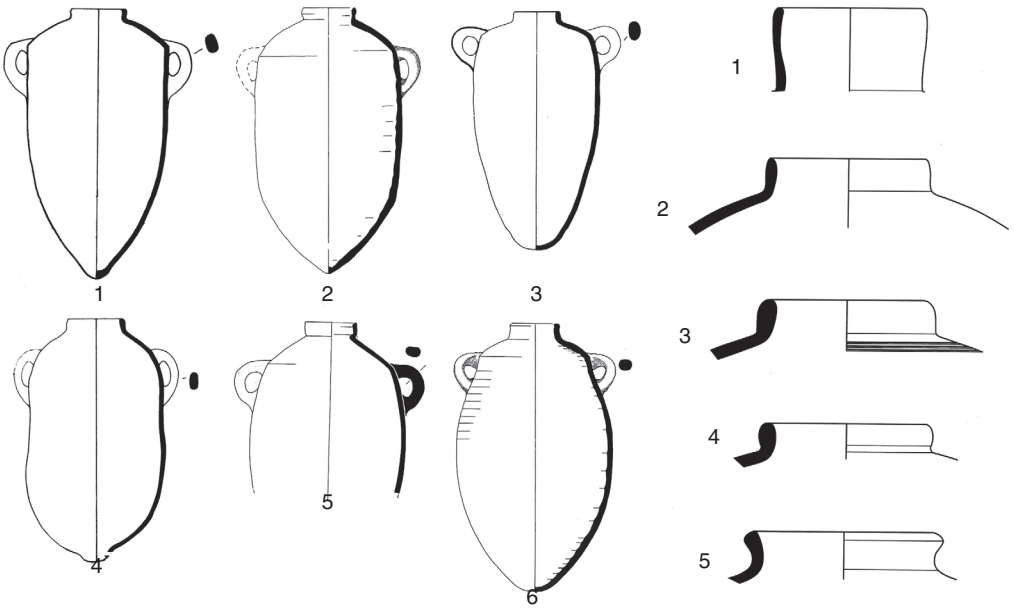
RECENT PHOENICIAN ARCHAEOLOGICAL EVIDENCE

In summarizing the implications of some recent gains in Phoenician archaeology, Barry Beitzel (2010) concludes that a tenth-century joint nautical venture of Tyre and Israel is plausibly a historical fact, not merely biblical hyperbole or trope. Similar statements, citing the ancient accounts as credible or historical, precede this (González de Canales, Serrano, and Llompart 2008; Mederos-Martin 2006), and are similarly based on radiometric dates collected since 1998 and integrated into various Mediterranean dating schemes. Much of the crucial work is reported in two editions, *New Dawn for the Dark Age? Shifting Paradigms in Mediterranean Iron Age Chronology* (Brandherm and Trachsel 2008) and *Beyond the Homeland: Markers in Phoenician Chronology* (Sagona 2008). The genesis of both books was the 1998 discovery of thousands of sherds of Phoenician and other foreign pottery, copper, iron, silver, ivory, worked ostrich egg, and shekel weights inscribed with Phoenician at the Town Site (Plaza de las Monjas) at Huelva, Spain. Cattle bones from the earliest stratum date with 94 percent confidence to 930–830 BC (Nijboer 2008: 370–372). It has been consistently interpreted by the excavators and others as an emporium (González de Canales, Serrano, and Llompart 2004). The Phoenician pottery (more than 3,000 sherds) has been closely related to the ceramic sequence at Tel Dor (Figure 8.3), whose excavators specify that all the Huelva Phoenician pottery could be late Dor Ir1 or 2a, that is 980–830 BC by Mazar's conventional chronology or roughly ninth century by the Dor low chronology (Gilboa, Sharon, and Boaretto 2008: 170). Taking this into consideration, the Huelva excavators fix the earliest Town Site stratum at Huelva at "c. 900 including perhaps the late tenth century" (Gonzalez de Canales et al. 2008: 636–642). The ceramic and radiocarbon dates of the early Town stratum appear to follow closely after an earlier Huelva stratum found in the 1923 salvage excavation of Ria de Huelva, or the River Site, which produced six samples of wooden spear shaft that dated on average to 2815 +/- 70 BP (Nijboer 2008: 372), or 1049–901 with 2 sigma and 1004–926 with 1 sigma range (Torres Ortiz 2008: 137). The River Site was more homogeneous, yet included bronzes that have been linked to Cyprus (Torres Ortiz 2008). The bronze fibulae specifically occur widely enough to allow Nijboer (2008) to link Euboea, Amathus, Achziv, and Huelva in the eleventh to tenth century BC, using associated ceramics and C-14 dates to support the attribution of the fibula as an effective type-fossil or diagnostic artifact (Figure 8.4). Thus, Huelva was a major harbor already by 1000 BC, strategically sited on a promontory between two rivers (Odiel and Tinto) leading into a major mining region, trading goods from Northwest Europe to Phoenicia. Before that century was out, there was an impressive Phoenician material presence at the site.[7]



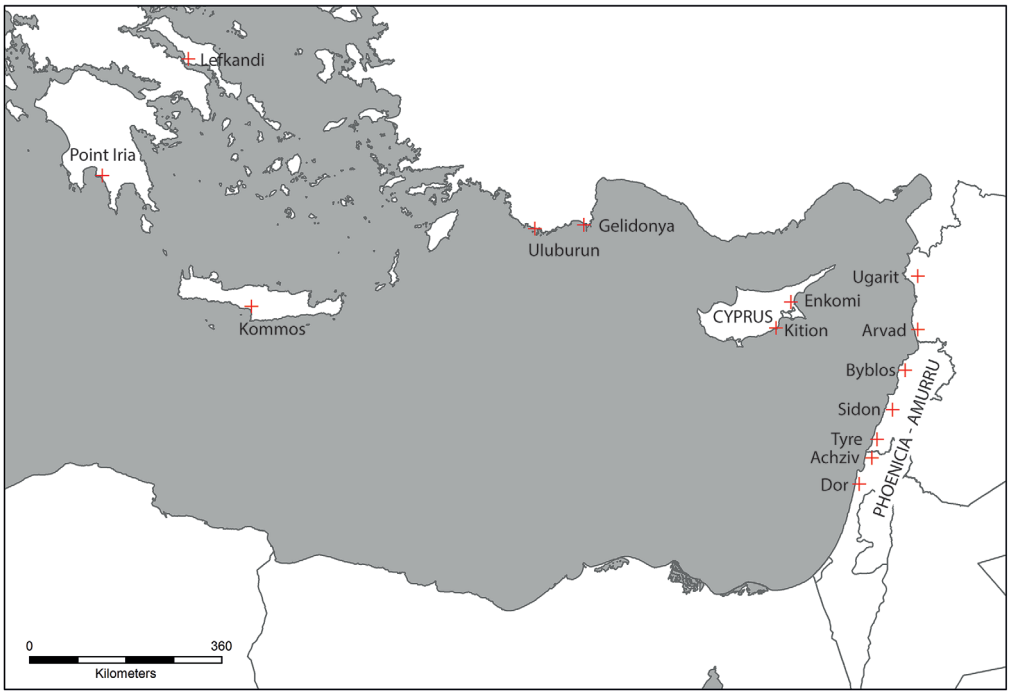
8.3. Storage jars from Phoenicia (left, after Gilboa et al. 2008, fig. 16, courtesy of the Tel Dor Project), and storage jar rims from Huelva (right, not to scale, after González de Canales (2008, fig. 6)).

Soon after the 1998 discoveries at the Huelva Town Site, A. J. Nijboer initiated the Groningen Iron Age dating project to generate more carbon sampling and links to stratified pottery from Phoenician sites around the Mediterranean (van der Plicht, Bruins, and Nijboer 2009).[8] Nijboer's collaboration with the Hamburg University excavations at Carthage in 2000 produced C-14 dates for cattle bones that pushed the earliest levels there back to the late ninth century (Docter et al. 2005, putting the Hellenistic legend of the Tyrian princess escaping to Cyprus, and continuing to Tunisia, where she scammed the locals out of enough land to start a colony at Carthage in 814/813 BC, on firm ground.[9] Elissa's flight, like Solomon and Hiram's joint venture, is converging with archaeology.[10]



8.4. Achziv-Amathus-Huelva type fibula (after Nijboer 2008, fig. 8.2). Copyright held by Groningen Institute of Archaeology.

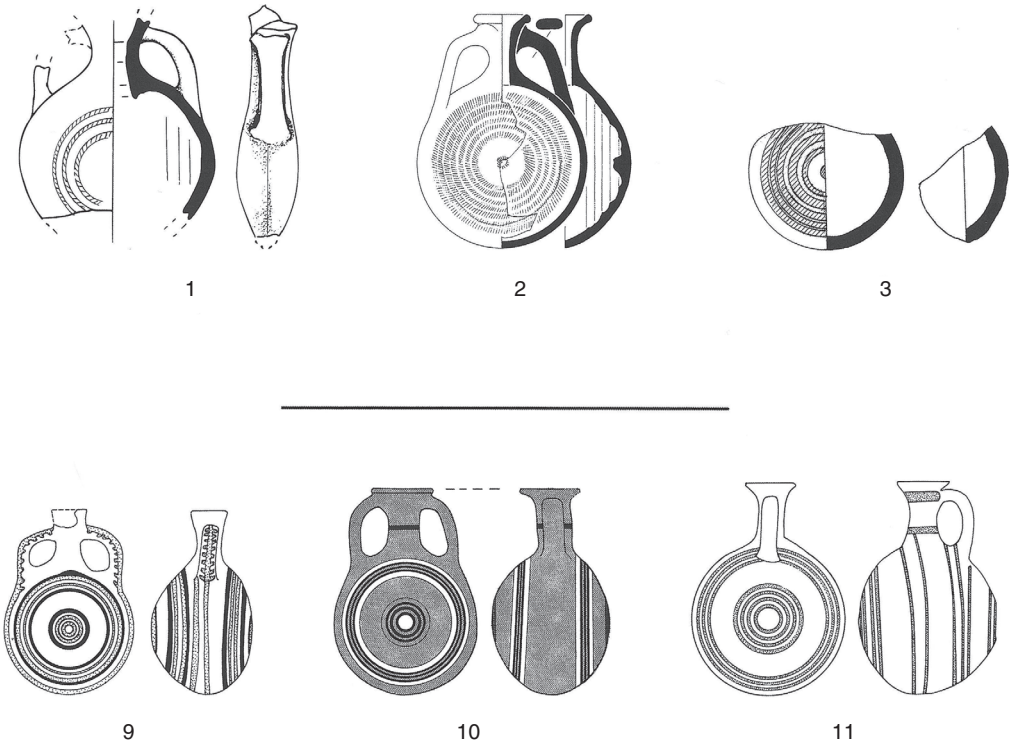
Many of the Sagona volume contributors recognize the importance of the ceramic sequences and numerous radiocarbon samples from Tel Dor, Israel, fully presented by Gilboa et al. (2008). In the twelfth-century Early Iron Age stage they refer to as "germination," Cypriotes resettle in Phoenicia, and a "Cypro-Phoenician economic and symbolic sphere of interaction" begins, which is both quintessentially Phoenician and "the first manifestation of commercial promotion" (Gilboa et al. 2008: 132). Their budding stage, from 1000 to 925 BC, features energetic commerce with Cyprus but no Phoenician settlement there. This changes in the "opening" phase, or late tenth century with sustained contacts encompassing Cyprus, the Aegean, and Sardinia.[11] If the ceramic evidence is still too ambiguous to determine who was moving westward, Levantines or Cypriotes (Gilboa et al. 2008: 157), and the eleventh-century foreign presence at the Ria de Huelva site looks more Cypriote than Phoenician (Torres Ortiz 2008: 138), a working definition of Phoenician culture as "Cypro-Phoenician" is perhaps unavoidable.[12] However not all agree that Cypriotes or Phoenicians reached Huelva by the eleventh or even tenth century. Gilboa (2013) cites the variation in C-14 dates obtained even from sealed deposits as undermining the reliability of early dates. The rebuttal to this objection rests upon the technique of weighted averaging, about which there has been considerable debate (Bruins, Nijboer, and van der Plicht 2011; Fantalkin, Finkelstein, and Piasetzky 2011) but not much consensus, the issue being whether it is statistically sound to average samples that do not represent a



8.5. Phoenicia/Amurru and points of contact on Cyprus and in the Aegean.

single event (Gilboa 2013: 322). What is less debatable is the context of the Plaza de las Monjas samples, which despite the excavators' best intentions could not be a controlled excavation but a salvage from below the water table (González de Canales et al. 2008: 631). Thus, Gilboa sees the supposedly tenth-century BC or Iron IIA material from this context as sparse and possibly later in date.

Joanna Smith's report in the Sagona volume (2008) upholds the conventional view of Cyprus being the first Phoenician outpost, marked by economic interdependence with the coast established by the eleventh century BC. Smith implies that the thirteenth-century BC foundation of Kition was related to Levantine trade because coastal sites were rare, with its presumed partner being Ugarit. By the eleventh century BC, Ugarit was a ruin, of course, but the Levantine relationship apparently intensified with another coastal foundation being made at Salamis, as a port for Enkomi (Figure 8.5). Phoenician influence becomes control only by the eighth century, according to Smith. When the great sanctuary at Kition became Phoenician or Canaanite is unsolved, but a *terminus post quem* must be the ninth century, when a red slipped bowl inscribed with a Phoenician phrase including Astarte appears; subsequent phases or floors have inscribed devotions to Baal (Karageorghis, in Moscati 1988: 153–155; Smith 2009: 146). Negbi (1992: 604) argues that the sanctuary included twin, male- and female-devoted temples already in the twelfth century that would have served Levantine immigrants.



8.6. Bichrome containers from Phoenicia (1–3) and Cyprus (9–11), dating to the first stage of Phoenician expansion (after Gilboa et al. 2008, fig. 8.5). Courtesy of the Tel Dor Project.

The inability to clearly delineate between Cypriote and Phoenician material culture is proving to be one of the more intractable, confusing problems in Phoenician historiography.[13] Smith's caution or even vagueness about when Phoenician influence on Cyprus began lends support to Gilboa's minimalist reconstruction of westward expansion. Many of the Bichrome vessels in Cyprus were apparently made in the Carmel (Figure 8.6); but this is taken not as evidence for Phoenician westward expansion (either presence or strong commercial contact), but a social relationship characterized for now as a "specific bilateral Cypro-Phoenician stylistic discourse" between Cypriotes at home and abroad (Gilboa 2013: 324–325). The tortuous topic of ethnicity will be discussed in more detail in the following text, but here it may be admitted that there is a broad lack of agreement, or perhaps comfort with, how ceramics and ancient peoples are interdefined. For many, the presence of substantial amounts of Phoenician or Cypro-Phoenician Birchome made in Carmel but deposited on Cyprus would indicate, as well as anything might be expected to, Phoenician expansion to Cyprus by the eleventh century BC. Without a convincing demonstration of how Phoenician-manufactured ceramics functioned

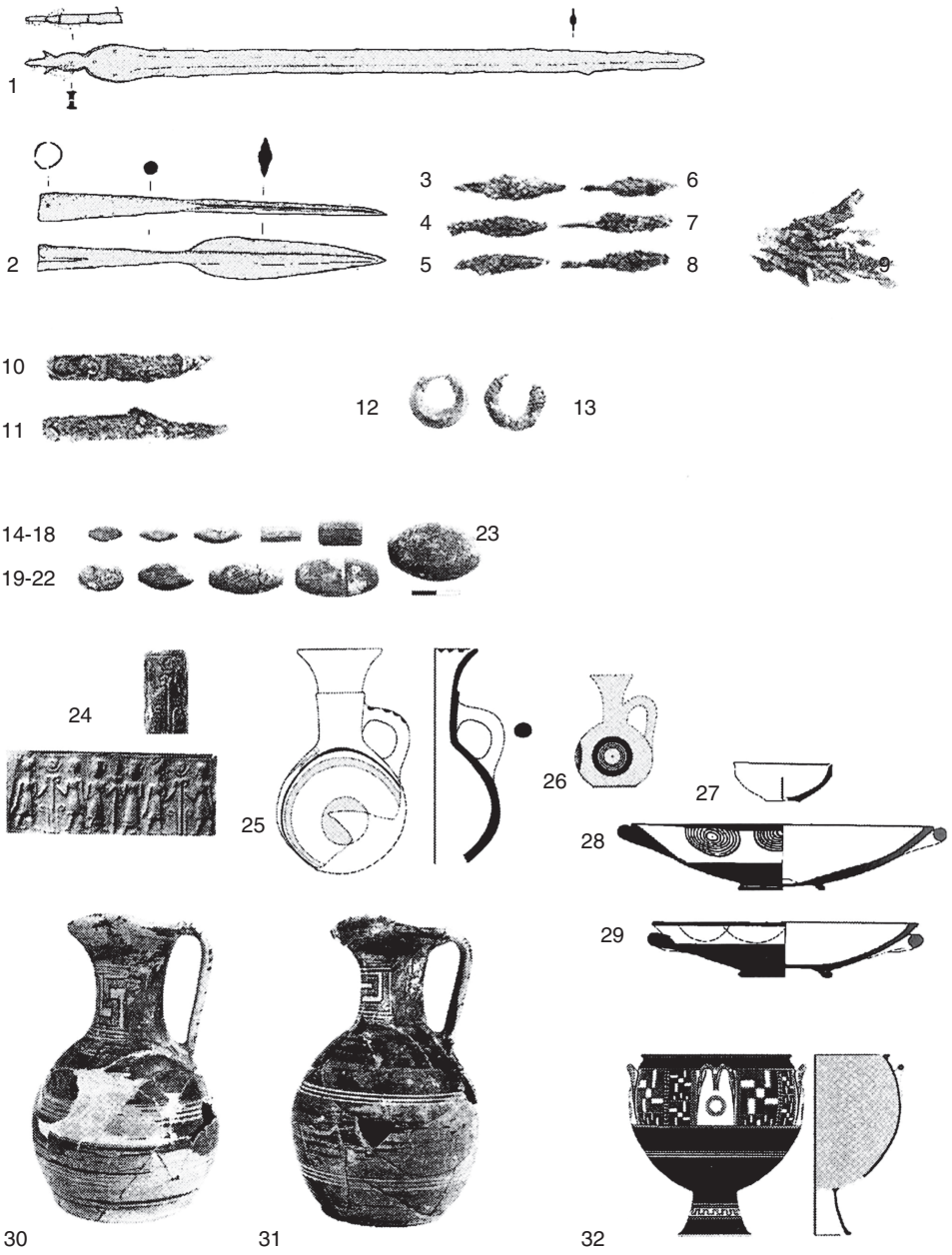
in their Cypriote social context, a more precise definition of the relations between Cypriote and Phoenician populations based on those ceramics seems highly speculative. Meanwhile, there seems to be ample evidence for Phoenician pottery usage by the eleventh century and a debatable but plausible Phoenician temple at Kition by the same time.

Since the early 1990s, Temple A at Kommos on Crete has been taken as a datum for the reach of western expansion by the tenth century (Kuhrt 1995: 410; Negbi 1992: 608–609; Winter 1995: 251); the second phase of Temple A, where most of the Phoenician transport jars fragments were excavated, dates by Cretan Protogeometric ware to ca. 950–900 BC (Kourou 2008: 320). Citing Bikai's (2000) analysis of the Phoenician ceramics from Kommos, Gilboa (2013: 316–317, 325) sees 900 BC as an acceptable date for Phoenician expansion to Crete but without much presence until the ninth century, in agreement with Kourou (2008: 320). According to Gilboa, Bikai's Type 9 Tyrian Storage Jar (Figure 8.4) evolved rather slowly, making it an imprecise chronological marker. A secure date for Phoenician presence at Kommos thus relies on a later association with the Cretan Late Proto-Geometric ceramics (Gilboa 2013: 325). On the northern side of Crete, from the end of the tenth century, contact is marked by the Phoenician-inscribed bowl in Tekke Tomb J at Knossos (Kourou 2008: 329, fig. 14).

By that time, there is rich Levantine material in Euboean graves that also begins in the tenth century and seems to intensify in the ninth. The so-called Warrior's Tomb (T. 79) at Lefkandi (Kourou 2008: 318; Figure 8.7)[14] is particularly interesting, as the early ninth-century assemblage includes material such as balance weights, scrap silver, and a Syrian cylinder seal that might lead one to interpret the tomb as belonging to a well-armed trader (Figure 8.7).

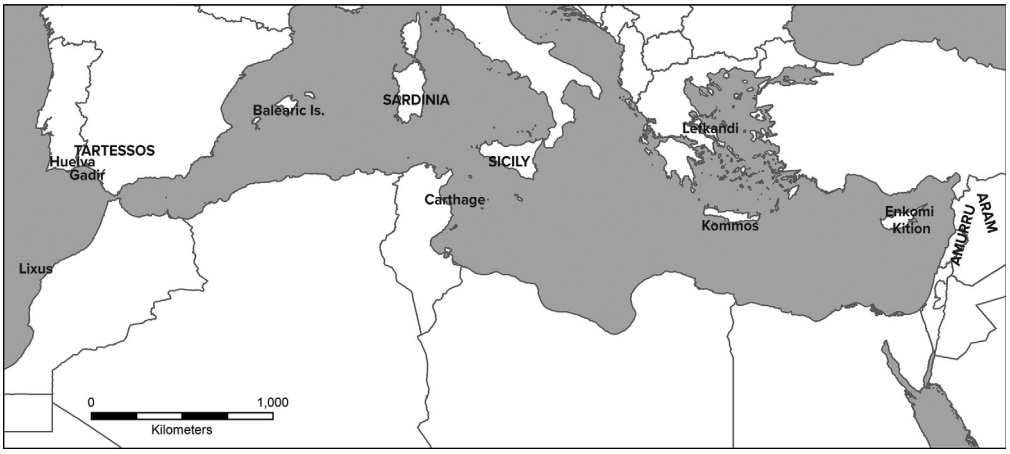
Albanese Procelli's (2008) report from Sicily notes that Late Bronze Age Cypriot and Canaanite jars, along with copper ingot fragments and a bronze smiting god figurine are all in evidence. But his conclusion, that Phoenicians arrived only by the eighth century, appears to ignore this evidence, raising another issue of bias, perhaps the dominance of the so-called Classical order that Nijboer claims (2008: 447–449) tends to deny early Levantine influence in the West.

Although they are not discussed in Bernardini's chapter in Sagona (2008), the Phoenician inscriptions known since the eighteenth century on Sardinia are still crucial while highly problematical (Beitzel 2010: 49; Lipinski 2004: 236–247). The Nora Stone, from around 800 BC, provides a key piece of the Phoenician westward puzzle, providing the earliest extrabiblical reference to Tarshish, as well as a dedication to the Cypro-Phoenician deity Pummay. Two other Phoenician inscriptions date to the tenth and ninth centuries, none of which is news until put into the new context of systematic contact a century or two earlier than previously thought and carried out by Cypro-Phoenicians



8.7. Weapons, silver, balance pan weights, cylinder seal, and ceramics from Tomb 79 ("the Warrior's Tomb") at Lefkandi, Euboea (after Nijboer 2008, fig. 8.1). Copyright held by Groningen Institute of Archaeology.

rather than simply Phoenicians. Bernardini's ceramic study suggests that whatever the philological debates over the Phoenician inscriptions, a ninth-century *terminus post quem* for contact looks the most likely.[15] This raises a question regarding the route(s) taken by Cypro-Phoenician expansion.



8.8. Mediterranean littoral and possible waypoints within Cypro-Phoenician reach by the tenth century BC.

The conventional view has a progression from the Aegean that touches Italy, Sardinia, the Balearics, and the Iberian coast (e.g., Cunliffe 2008, fig. 9.5, or Abulafia 2011: 71), but a plausible alternative route would turn south from Italy and Sicily, where there is ample contact already by the thirteenth century BC (Albanese Procelli 2008: 463), then to Carthage and along North Africa before crossing north again, via Gadir and Huelva, to Tartessos (Figure 8.8). Without an archaeologically definitive tenth-century waypoint between Huelva and Sicily (Sardinia being a debated possibility), the question is moot for now.[16]

Aubet's (2008) contribution to *Beyond the Homeland* departs from a cornerstone of the APP that her prior work previously embraced. Citing evidence of Phoenician contact at Kommos and Huelva in the tenth century BC and at Carthage in the ninth century BC, she concedes that her earlier thesis, as advanced in *Phoenicians and the West* (2001), relied overmuch on Frankenstein's theory of eighth-century Assyrian pressure forcing Phoenicians westward to find silver that might keep the imperial beast at bay. Thus, in light of current evidence, Aubet's Phoenicians ventured westward in a programmatic fashion, not in hasty flight, but still drawn mainly by Iberian metals (2008: 248). Based on the earlier dates, she goes on to find support for Josephus's "Annals" and Timaios's account of Elissa founding Carthage. Perhaps more importantly, Aubet notes that the Huelva ceramics now dated to the tenth and ninth century can be used to contextualize material from other sites in Tartessos, such as Carambolo and Gadir (Aubet 2008: 247, but n.b. Gilboa's 2013 doubts, previously).[17]

As Neville (2007: 35) points out, Phoenician presence on Portuguese soil has been admitted only since 1990. Thus, one can expect changes to the picture of Phoenician colonization as excavations are allowed to progress and be freely interpreted. Neville describes a fairly intense contact at small habitations

situated above all the major estuaries (from north to south: the Mondego, Tagus, and Sado) and along smaller streams dotting the southern Algarve, such as at Tavira and Castro Marim. Neville is definitive about the Phoenician presence not predating the eighth century, since the earliest Levantine ceramics found are red-slip wares and R1 amphorae (Neville 2007: 11, 35–42). Arruda (2009), by contrast, sees substantial "precolonial" Phoenician contact at sites that were indigenously founded but have small percentages of Levantine material in the assemblages. Phoenician-founded sites are rare and relatively late, such as Santa Olaia on the Mondego River and the remarkable rectilinear building at Abul on the Sado, both founded in the seventh century (Arruda 2009: 125). However, at some indigenous sites, such as Santarem and Cachouça, on the Tagus (Figure 8.1), "orientalizing" material (e.g., wheel-made pottery, iron, glass beads, and polychrome glass) occurs earlier and in context with material dated to the tenth and ninth centuries by radiocarbon (Arruda 2009: 120–121), which helps to explain the floruit of the Portuguese LBA culture and the foundation of sites above coastal estuaries. Like many scholars, then, Arruda sees two phases in Phoenician expansion, although she replaces the "colonial" terminology with "nonhegemonic" and "systemic" modes of contact (Arruda 2009: 121, citing work of Jaime Alvar) to describe pre- and post-eighth-century processes, and seeks to push the earliest contact, especially in the tin-rich Beira Alta region, back to the eleventh century based on what seems like meager C-14 evidence.

Besides the evidence of early Atlantic contacts, archaeologists in Iberia are finding diverse economic explanations beyond simply the effluent silver and gold of Hellenistic legend (especially Diodorus, Strabo, and Pliny). Treumann (2009) sees the Phoenician colonization of the Andalusian coast as driven by shipbuilding: prime deciduous and coniferous timber and resins were abundant, though direct evidence of their exploitation in Iberia is slim. In addition, as Dietler summarizes in *Colonial Encounters*, salt, marine, and agricultural products were also exploited (2009: 7).

Finally, regarding the promise of Iberian archaeology, Neville (2007) and, especially, Belén Deamos (2009) have alluded to tensions between ancient and modern realities. In a modern atmosphere of national pride based on ancient origins there is limited support for excavating and publishing ethnically heterogeneous material. This problem, on top of the economic challenges facing archaeologists in Iberia, has generally repressed evidence that is only recently coming to light. Belén Deamos sees Phoenician colonization all over the lower Guadalquivir. This settlement pattern, including the spectacular cultic sites going back to the eighth and ninth centuries BC at Carambolo and Coria del Rio (both situated close to a broad estuary that was more like a gulf in its time, Figure 8.1), coupled with tenth-century BC contact at Huelva, speak to an intensity of relations inconsistent with notions of acculturation that may

appeal more to a chauvinistic sociopolitical agenda. The Levantine role in Iberian complexity is further obscured by a scholarly convention that insists on reducing pre-eighth-century contacts (those prior to a supposedly decisive Assyrian imperial impetus) to ephemeral status.

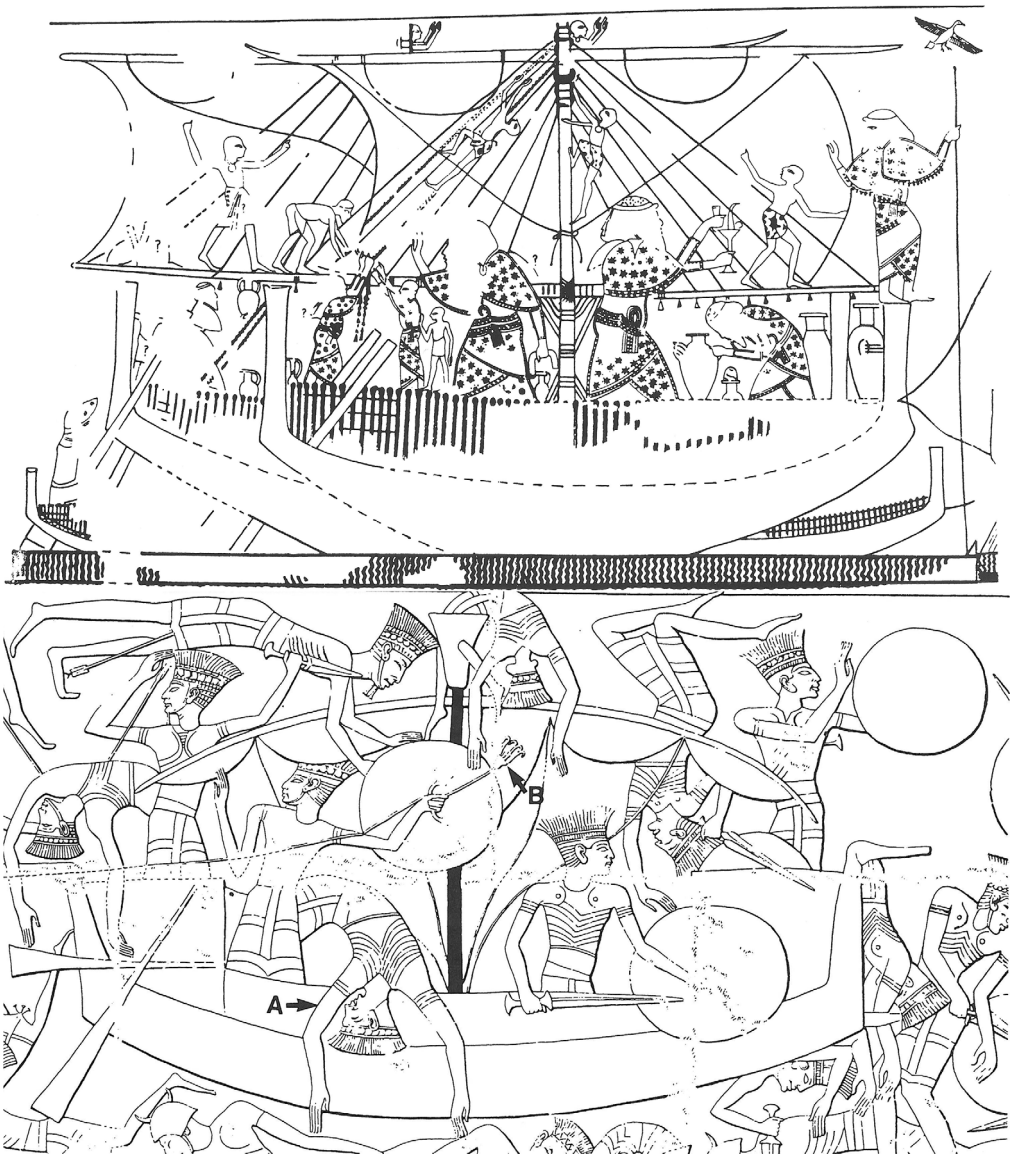
From beyond the pillars of Herakles let us return to the Levant before ending this abbreviated archaeological review. The 2010 *Near Eastern Archaeology* double volume dedicated to Lebanese excavation provides an accessible, illustrated update. Recent Lebanese projects support a picture of occupational continuity at coastal urban centers despite some destructions and temporary abandonments. This generally agrees with the situation toward the north: Ugarit did not survive the early-twelfth-century collapse, but its port of Ras Ibn Hani did, as did Tell Sukas, Tell Tweini, and Tell Kazel (Bretschneider and van Lergerghe 2008: 43), as well as Kition and Enkomi on Cyprus. The pattern continues down the coast with Phoenician or Early Iron Age towns all the way south to Achziv, Tel Abu Hawam, and Akko, with major towns in between, including Beirut, Sidon, Sarepta, and Tyre (Markoe 2000: 23, 192–206). Recent excavations have diversified this picture, ranging throughout the country and including urban centers, fortified outposts, and small rural villages. Artin's (2010) work on unpublished ceramics from burials uncovered in Dunand's excavations at Byblos clarifies the earliest occupation there, which continued from the fourth millennium Chalcolithic, earlier than even Herodotus claimed. New excavations at Tell Fardous-Khafarabiday (north of Byblos) reveal northern Early and Middle Bronze Age ceramic sequences, as do those at Tell Arqa (Genz 2010; Thalmann 2010). British Museum excavations since 1998 at Sidon's "College Site" have exposed a large Bronze Age settlement, with especially rich evidence of foreign trade that includes Minoan pottery, Levantine painted ware, duckbill axes, and Tell el-Yehudiyeh ware from the Middle Bronze Age and a cuneiform tablet fragment and quantities of Mycenaean pottery from the Late Bronze Age. A cartouche of Egyptian Queen Twosret, for example, dates to the early twelfth century BC or about when the Annals of Tyre claim Sidon is the dominant Phoenician city (Doumet-Serhal 2010). The notion that Sidon controlled a number of satellite towns and even competing neighboring kingdoms in the Bronze Age and later in the Iron II (for recent summary of references: Boyes 2012; Jigoulov 2007) may receive support from the discovery of a new fortified site at Tell el-Burak, just north of Sarepta (Sader and Kamlah 2010).[18] The Middle Bronze "monumental fortified palace," including a room with painted walls is the first such building found in Lebanon and provides architectural remains from the same period as the numerous burials at Sidon, where there is no contemporaneous architecture. Another significant town, known only from ancient texts before 1990, is Beirut, which, as noted by Markoe (2000: 201–202), has revealed a great deal of material, including pier-and-rubble architecture already in the MB, a variety of

Cypriot and Mycenaean wares in the LB, and in the Iron I and II, a storeroom packed with storage jars, and murex dye and other industrial facilities at the Bey 003 location alone (Badre 1997).

KEEPING THE MARITIME IN PERSPECTIVE

Sailors in ships connected all these disparate regions of the Mediterranean littoral just described, and three shipwrecks have by now been published sufficiently to be integrated more fully into discussions of early Phoenician expansion. Excavations of the fourteenth century BC Uluburun shipwreck led by George Bass and Cemal Pulak of the Institute of Nautical Archaeology ended in 1994 and have generated a steady stream of articles on the ship, its cargoes, mariners, routes, and modes of trade (e.g., Bachhuber 2006; Monroe 2010; Pulak 1998, 2008). Despite the lack of a final report, beautifully researched and illustrated catalogs have been produced by the German Bergbau-Museum in Bochum (Yalçin, Pulak, and Slotta 2005) and the Metropolitan Museum (Aruz, Benzel, and Evans 2008). This material was understood only partially by the late 1990s and is thus underrepresented in the Aubet and Markoe works. In more recent histories, this and other ancient shipwrecks are often inaccurately described or interpreted by nonspecialists. The same goes for a thirteenth-century shipment of Cypriote ceramics lost at Point Iria off the southern Peloponnese (Phelps, Lolos, and Vichos 1999). Like the Cape Gelidonya shipwreck (Bass 1967), these finds contribute to an impression of strong Levantine-Aegean ties established in the Late Bronze Age. These shipments differ greatly from each other, though they were all carried in small vessels, none more than 15 to 16 m long. Despite the imaginary 200 tonners frequently found in the literature, most of which can be traced to the influential work of Lionel Casson (1971: 36), there is no evidence for Bronze Age merchantmen exceeding about 20 m in length or a 20-ton capacity (Monroe 2007). Finally, there is the 1999 discovery of two eighth-century Phoenician wine freighters, also under 15 m long, lost off the Gaza coastline, perhaps en route to Carthage (Ballard et al. 2002).

How any of these ships were sailed is another story. Two of history's most important seafaring inventions, the keel and loose-footed sail, appeared in the Late Bronze Age, the keel arriving as early as Hatshepsut's "Byblos-ships" sailed to Punt ca. 1500, and the loose-footed rig by no later than 1200, as seen on ships on both sides of the "Sea Peoples" *naumachia* depicted at Medinet Habu (Figure 8.9). Both rigs have been replicated and tested successfully: a loose-footed sail allowed the *Kyrenia II* replica to point or close-haul fifty degrees to the wind (Cariolou 1997); and the *Uluburun II* built by the 360 Degree Historical Research Association in *İ*zmir, Turkey, incorporated a boom-footed rig (based on Egyptian models and iconography) and has logged more than



8.9. Above, ship with boom-fitted rig from fourteenth-century Theban tomb of Kenamun (no. 162, after Wachsmann 1998, fig. 3.3); below, early-twelfth-century "Sea People's" ship with loose-footed rig (after H. H. Nelson 1930, Medinet Habu I, pl. 39, courtesy of the Oriental Institute of the University of Chicago).

3,000 miles in the Aegean since 2005 (Erkurt 2005). While the early keel, which barely protruded beyond the contours of the hull, could not significantly prevent leeway, it provided essential longitudinal stiffness and a strong foundation for a mast-hull joint that could withstand enormous pressures from winds and hull motion at sea. In addition, although the loose-footed rig could probably reach more points of sail with greater ease, it would be a mistake to

claim that new routes were opened up by that invention alone. The footless rig may have been designed more for the needs of warfare than commerce because it effectively removed the obstructing sail from the fighting deck of warships, which also happen to appear at about the same time, or ca. 1200 BC at both Medinet Habu and on Late Mycenaean and Minoan III C pottery (Wachsmann 1998: 123–161). Hellenistic authors such as Aratus (3rd c. BC, *Phaenomena* 37–44; Negbi 1992: 614) claim Phoenicians out-navigated the Achaean Greeks of Homeric legend by observing Polaris instead of just Ursa Major. The location of the two deepwater Phoenician wrecks thirty miles off Gaza is unusual and perhaps suggests some reliance upon celestial navigation instead of piloting using landmarks.

Perhaps more debatable than the size or routes of Phoenician ships are the motives and modes of the traders. As has been recognized, reconstructions of Phoenician trade practices should rely more on second millennium textual sources (Aubet 2001: 98; Kuhrt 1995: 406), particularly Akkadian tablets from Late Bronze Age Emar, Ugarit, Boghazkoy, Amarna, and a number of Assyrian sites. Ugaritic texts also document trading activities but are inherently laconic and ambiguous enough to reduce their usefulness in resolving debates over the status of traders. McGeough's study of the Ugaritic texts, however, concluded that a network of actors and institutions connected through ad hoc economic relationships controlled the economy, not the palace (2007: 338, 380–381). This agrees in outline with the current consensus, as advanced in van de Mieroop's history, wherein private entrepreneurs were in charge of trade at Ugarit (2007: 142).

Elsewhere, I have attempted to define the social relations and means of exchange of Late Bronze Age trade, as documented in texts from the linked Near Eastern and Eastern Mediterranean worlds, including Ugarit (Monroe 2009a, 2015). Generally in evidence are political economies that balanced traditional modes of gift or prestige-based exchange with entrepreneurial or profit-seeking trade. Despite living under a dynastic kingship system, individuals and officials at Ugarit were apparently free to engage in profit-oriented exchange, while paying some form of tax to collectors, probably working under the secular governor/prefect or *sākinu* (Monroe 2009a: 168–172; van Soldt 2010: 250–255). Royals couched their acquisitions in the ceremonial, familial terms of gifting. All of these pursuits appear highly rational in context. Some men who bought and sold things were recognized in bureaucratic records by the Akkadian title, *tamkāru*. Several entrepreneurial people at Ugarit lack any such title and had dealings having nothing to do with the king. Others worked for the king, and were endowed with silver, though no merchant can be identified as a servant of a king. Notions of royal ownership of the means of exchange are thus hard to uphold, except on ideological or theoretical premises. Access was clearly easier and more efficacious than trying

to own merchants, including their equipment, expertise, and other means of exchange. Aubet recognized this aspect of trade in the Assyrians' co-opting of Phoenician maritime expertise (2001: 55–57).

Despite the wealth of textual information available in LBA sources, maritime trade is still poorly documented even at Ugarit. The tablet granting Sinaranu the shipowner exemption from certain taxes on his Cretan trade is the best known of about thirty texts (out of the more than 3,000 tablets from Ugarit) that deal directly with seafaring.[19] This makes Uluburun all the more important for filling in missing technological aspects of the means of exchange. As balance-pan weights did for land merchants, they helped seafaring merchants pursue profit rationally in an interregional milieu. Balance-pan weight sets from Uluburun confirm that seafaring merchants could count currency and calculate values aboard ship (Monroe 2009a: 47–56; Pulak 2000). Wooden writing tablets from Uluburun suggest correspondence written at sea may have been an important component of overseas trade, and a tantalizing Ugaritic text may be the only textual reference to writing aboard ship: Text 31 in *A Manual of Ugaritic* (Bordreuil and Pardee 2009) describes the itinerary of the Queen of Ugarit "on the sea," "on the coast," or "on the day," depending on how one interprets the laconic, ambiguous *b ym*.[20] Scribes were taught to write in the homes of wealthy merchants at Ugarit, and Akkadian business correspondence reveals the importance of writing to maintaining information networks (Monroe 2009a: 140–145; van Soldt 1999: 33). Some ships were privately owned; others controlled by temples and palaces. Ship capacities were known by merchants and kings and recorded in units of standardized containers; the fifteen-meter ship that was wrecked at Uluburun was probably quite large for its day (Monroe 2007), and it was lost with a cargo of metals, glass, resin, wood, and more that rapidly adds up to more than 7,000 silver shekels (the currency of the time at Ugarit and much of the Eastern Mediterranean world); that amount was enough wealth to feed a city like Ugarit for most of a year, or purchase its independence from Egyptian and Hittite overlords for several years (Monroe 2010: 27–28).[21] Such losses could be catastrophic, and civil and international laws provided some protection against them (Monroe 2009a: ch. 5; Wachsmann 1998: 323–325).

Looking more at the social relations of maritime exchange, social distance is a key condition for merchants, who daily violated social mores like generosity, altruism, and brotherhood to engage in capitalistic, basically antisocial, activities (Monroe 2009a: 21–22, 178, 230–232, 281). Thus, trade was often relegated to foreigners with less local status to lose. Placing them in the socially distant, yet administered, space of the harbor (called the *kāru* in Akkadian) was a Bronze Age solution to the social distance problem, and so bespeaks the essential liminality of maritime trade (Monroe 2011). According to Braudel (1982: 167), any ethnic group could learn the rules of

trade and participate. Philip Curtin's analysis of cross-cultural trade agrees in that ethnic trade diasporas have typically been so successful in establishing networks that the ethnic homogeneity dissolves, leading to the creation of ecumenical zones (1984: 80–81). Thus, one may expect Greeks in either the Bronze or Iron Age to have accessed Phoenician-invented networks as they became more traveled. This fact might explain the mixed makeup of the Uluburun crew, which Pulak (2005) has argued included both Canaanite and Mycenaean folk. As the trust normally reserved for family or tribe was extended to ship and harbor mates, it is conceivable that water became figuratively thicker than blood. This conclusion corresponds with the suspicion that "Phoenician" may have been more of an economic class or literary trope than coherent ethnic group (Sommer 2010; Winter 1995). Likewise, Pulak's Mycenaeans on the Uluburun ship might possibly have been "Phoenicians," at least by trade if not descent.

Two salient points emerge from this archaeological (and textual) summary. First, the settlement continuity that runs from the Late Bronze Age into the Early Iron Age in the Levant has become more emphatic with archaeological progress in Lebanon; the evidence for earlier contact abroad is consistent with that pattern, and, indeed, it would seem to be a product of it. Second, the entrepreneurial, rational trading practices that supposedly mark the advent of Iron Age Phoenicia are already apparent in the textual and archaeological evidence for Late Bronze Age trade. Thus, one may reasonably hypothesize that the trans-Mediterranean networks that reached Huelva by ca. 1000 BC were a naturally progressive outgrowth of the Levantine-Aegean networks developed in the Late Bronze Age. How the contemporary, and thus crucial, textual evidence of Assyrian Annals can be reintegrated into this reconstruction will now be considered.

RETHINKING THE ASSYRIAN PRESSURE PARADIGM

The earliest Assyrian campaign to Phoenicia is that of Tiglath-pileser I (1114–1076), who claims the following:

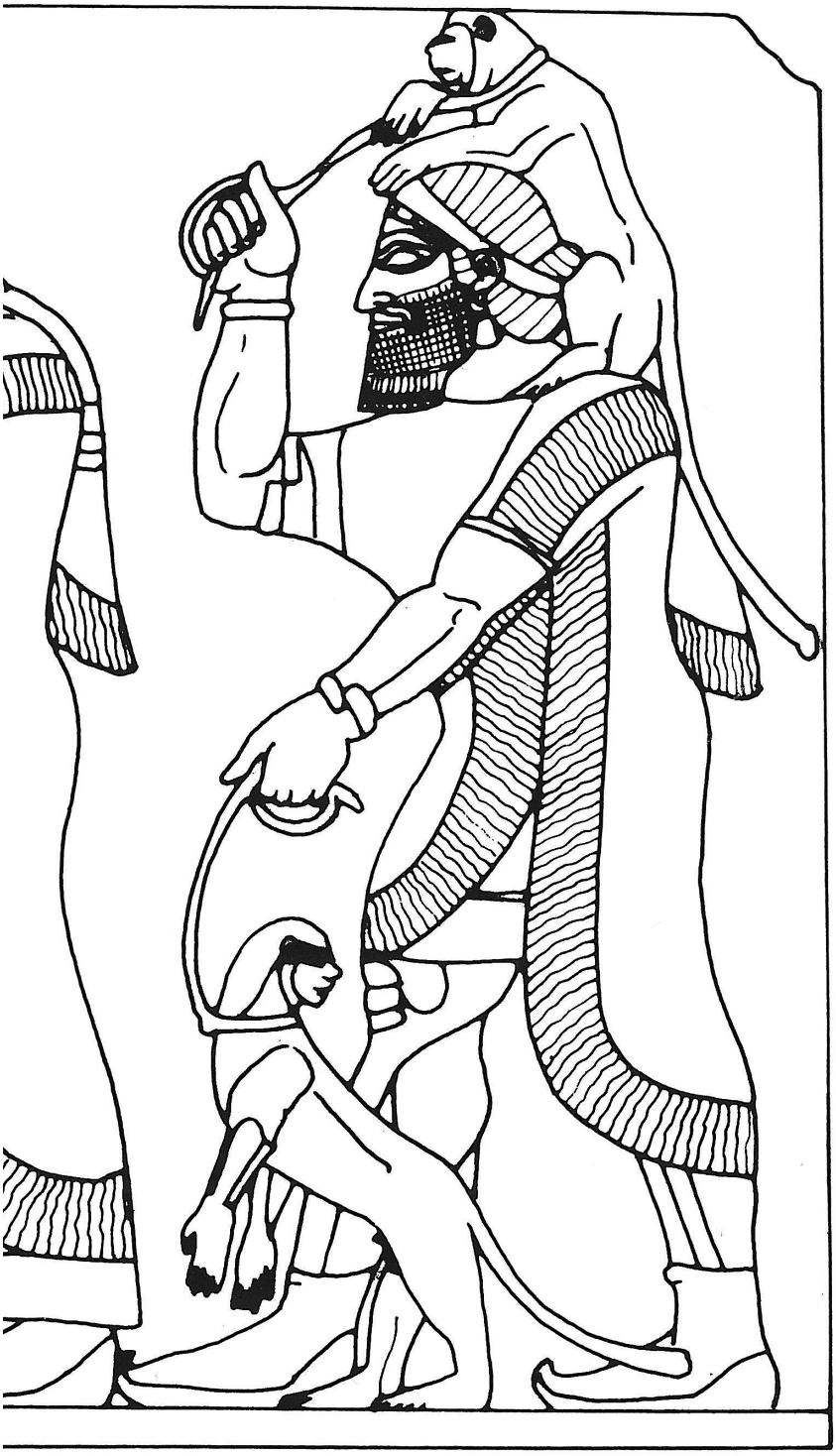
> I marched to Mount Lebanon. I cut down (and) carried off cedar beams for the temple of the gods Anu and Adad, the great gods, my lords. I continued to the land Amurru (and) conquered the entire land Amurru. I received tribute from the lands Byblos, Sidon, (and) Arvad. I rode in boats of the people of Arvad (and) travelled successfully a distance of three double hours from the city Arvad, an island, to the city *Ṣ*amuru which is in the land Amurru. I killed at sea a *nāḫiru*, which is called a sea-horse.[22] (Grayson 1991: 35–38, Text 3, lines 16–25)

Assur-bel-kala (1073–1056) claims similarly to have killed a hippopotamus in "the Great Sea" near Arvad; hunted lions, bulls, and elephants near the Lebanon; and "conquered lands from Babylon to the Upper Sea of Amurru"

(Grayson 1991: 99–105, Text 7). Then the Annals go silent on Phoenicia until Ashurnasirpal II (883–859). Assyriologists tend to downplay the early coastal campaigns as "prestige trips," explaining away the clear rhetoric of dominance as more symbolic than actual (Frankenstein 1979: 267; Kuhrt 1995: 360). Indeed, the period before the eighth century BC has generally been conceived in terms of market demand wherein the Phoenicians sought "economic ties with a substantial power, which could provide them with a market for their goods and specialized skills" (Kuhrt 1995: 408). Kuhrt's history establishes the marginal role of Phoenicia and its expansion "within the context of important political changes in the Near East, … directly linked to Neo-Assyrian imperial growth" (Kuhrt 1995: 410). While recognizing evidence of commercial activities predating "Phoenician colonialism," such as establishing a sanctuary at Kommos in the tenth century BC, Kuhrt's reading of these ventures is primarily as an adjunct of Assyrian imperialism. Van de Mieroop's history has Phoenicians similarly seeking out state-level markets inland (Neo-Hittite, Aramaean, Assyrian) in the so-called Dark Age, with the Hiram-Solomon trans-Mediterranean venture confidently discounted as a trope portraying one particular aspect of Solomon's overall corruption (2007: 220–23).

Whatever may be the merits of reconstructing Near Eastern history in global terms, the oft-deployed territorial, imperial perspective distorts our view of maritime phenomena such as Phoenician expansion. A history written from a Phoenician perspective would reconstruct the Dark Age differently. If one reads literally nothing into the biggest gap in the Assyrian Annals, and thus accepts that the first wave of campaigns to Phoenicia ended in 1056 BC, then there was a meaningful respite until the Assyrian army reappeared on the coast around 883 BC.[23] The APP argues that Phoenicians used these nearly two centuries to enrich themselves by trading with a temporarily lamblike Assyria. This implausibly bends the evidence two ways at once. A time of rebellion and lack of written sources and monuments is difficult to reckon with vibrant overland trade. After 1200 BC the entire region is supposedly disrupted by broken networks and decreased private trade (van de Mieroop 2007: 200–202). Assyria was a technological backwater until the ninth century BC, Tiglath-pileser I seeking Phoenicia more as a trade partner than as a vassal (Brinkman 1997). This would have been of obvious benefit to Assyria, but it is not as clear what the Phoenician interest might have been. As a market or commercial partner, Assyria would have compared poorly with maritime destinations that avoided all risks associated with crossing lands occupied by the revolting Arameans (Grayson 1991: 3; Liverani 2004: 214). Egypt, Cyprus, and other peaceful maritime markets would logically have been preferred.

For this position there is the well-known pseudohistorical testimony of the eleventh-century BC *Report of Wenamun,*[24] in which Tjeker-Baal, prince of Byblos, instructs Wenamun on Phoenician-organized shipping with Egypt:



8.10. Relief of tribute bearer from palace of Ashurnasirpal II (after Aubet 2001, fig. 27).

> Are there not twenty ships here in my harbor that do business with Smendes? As for Sidon, that other (place) you passed, are there not another fifty ships there that do business with Werekter and haul to his house? (Lichtheim 1976: 226)

Another twelfth- and eleventh-century BC factor in maritime expansion that points away from Assyria is the increasing aridity and temperature, documented in the palynology of coastal Syria and Western Greece, and oxygen isotope speleothem data from northern Israel (Drake 2012; Kaniewski et al. 2010). These new data coupled with long-known textual references to grain shortages in the late thirteenth and twelfth century BC – relief shipments to Hatti from Ugarit and Egypt, references to famine at Emar, and the Ramesside grain strikes – make for ecological facts that may have exerted more pressure than the Assyrians ever could, creating an impetus for the gathering of information about greener pastures abroad.[25]

Western expansion is also well established by the eleventh century BC, and several scholars looking at the so-called precolonial phase have hypothesized a distinctly northern-based (i.e., not driven by Tyre) movement in the eleventh and tenth centuries BC establishing a presence on Cyprus, Rhodes, and the Aegean (Fletcher 2006; Negbi 1992; Peckham 1998; Winter 1995). It is obviously an easier sail from Byblos, Arvad, or even Sidon than from Tyre, and if the language of eleventh-century Assyrian campaigns to the northern coast are given credence, then extra motivation exists for such movements. It is important to notice that Tiglath-pileser I also claims to have burnt, razed, and destroyed seventeen cities from Amurru to Babylonia, taking the booty and hostages back to Assur, and conquering Amurru (Grayson 1991: 59–60, Text 13).[26] From a western or coastal perspective, such campaigns could hardly have been perceived as just prestige trips. One may imagine at least a portion of westbound Phoenicians being motivated by such threats.

As noted in the preceding text, Aubet, the APP's erstwhile leading proponent, partially recanted some time ago. Her Phoenicians still go to Iberia for the metal, but earlier and not under the Assyrian lash. The legendary Tyrian colonists of 814 BC who settled Carthage, however, she now sees entirely as driven by Assyrian pressure, which one may fix at a decade after Shalmaneser III's reign ended in 824 BC. To measure Assyrian pressure in the ninth century BC, one must look also at Shalmaneser's predecessor. In the early ninth century BC, Ashurnasirpal II (883–859 BC) came to Phoenicia as the first Assyrian king to do so in nearly 200 years. He washed his weapons in the sea, imposed *maddattu*-tribute on the coastal kings, and subdued Mt. Lebanon *and the Mediterranean* (Grayson 1991: Text 1). Later, he held a ten-day feast at the opening of his new palace, hosting more than 47,000, including envoys of Tyre and Sidon, who were reportedly "sent back home in peace and joy" (Grayson 1991: 288–293, Text 30). Without much justification, proponents of

the Assyrian model interpret the monkeys and other material as commercial or ceremonial *gifts* rather than the "tribute" specifically noted as such by the Assyrians (Figure 8.9; Liverani 2004: 219; Markoe 2000: 39). This interpretation serves as a prime example of how an Assyrian focus distorts Phoenician history. Liverani's point here is to distinguish Ashurnasirpal II's relatively modest campaigns from the juggernaut of Shalmaneser III, whose armies for example are three times the size of his predecessor's. Thus, Liverani successfully explodes the notion of a unitary ninth-century BC Assyrian imperial program while unfortunately creating a false dichotomy regarding the impact of such policies upon one specific region that was on their receiving end. If indeed the material exchanged constituted "quite clearly a 'free' exchange of gifts – not implying any submission," pursuant to an invitation "of quite peaceful and ceremonial nature" (ibid.: 210), one must explain why they did not record the gifts as such, that is as *namurtu*, as was commonly done.

That is not to say that things did not get worse under the succeeding overlord – clearly they did. Shalmaneser III (858–24 BC) not only took *maddattu* tribute but waged a coastal campaign that defeated twelve armies, including those of Arvad and Byblos, and dammed the Orontes with 14,000 corpses. As a reminder of his visit, he also left a statue of himself on the coast (Grayson 1996: 11–24, Text 2). In his fourteenth year, he sent 120,000 troops against a coastal coalition and eventually "appointed governors everywhere and imposed upon them tax, tribute (and) corvée" (Grayson 1996: 32–41, Text 6). According to Shalmaneser, the coastal kings "ran away" to save their lives. It may be fair to venture that those with means thought seriously about sailing away too.

What impresses the most in this context is not Shalmaneser's strength of arms but that of a paradigm that could lead so many to construe Assyrian relations as anything resembling market demand during the ninth century BC (and into the early eighth, as in Markoe 2000: 40). This was clearly "command demand" and something to avoid if possible. Aubet's recent revision (2008), that Phoenicians reached the west by the tenth century BC in orderly progression, not panic, while the foundation of Carthage and later colonies was impelled by Assyrian pressure, looks like the direction Phoenician historiography is headed. But the textual evidence should be taken more critically, especially regarding Hellenistic material such as the Elissa/Dido legend. While it is now plausible that Tyrian royals landed at Carthage in 814 BC seeking a new home free from Assyrian pressure, it seems more dubious than ever that Elissa would have been the first Phoenician on the scene. A more plausible reconstruction would involve the contemplation of multiple preexisting routes via multiple ports known to sailors for a long time, a commercial information network produced by centuries of departures not only from Tyre but also Sidon, Arvad, Byblos, Ugarit, Kition, and so forth. In short, the network of routes known to Elissa's sailors, if they existed, was produced not by Assyrian

pressure but Assyrian *relief*, the well-known absence of campaigns to the coast from ca. 1056 to 883 BC. Thus, Phoenicians more likely laid the groundwork that would support greater migrations when the Assyrian monkey was really on their backs. If the creation or connection of a Mediterranean world is to be explained, credit should be given where it is due; it takes little away from Mesopotamian greatness to shift the paradigm and credit Phoenician agency with creating the largest information network the world had ever seen by the tenth century BC.

IN SEARCH OF A NEW PARADIGM: RETHINKING PHOENICIAN "CIVILIZATION"

Without the explanatory shadow of the APP, one is left to consider other means of illuminating the elusive phenomena of Phoenician expansion. A world-systems paradigm is still quite relevant, as it highlights power dynamics in intersocietal networks and realities of differential development (Monroe 2009b). However, any single metaphor should not be expected to serve fully or be free of problematical assumptions.

Chapters in this volume, for example, were marshaled under the rubric of "trade and civilization," and whatever our intentions, many could take issue with making civilization a central analytical issue. Dictionary entries for "civilization" have a distinctly Western and colonial slant. While there is nothing sinister in "advanced intellectual, cultural, and material development in human society," anthropologists detect a tilt against indigenous peoples. Edward Tylor's seminal nineteenth-century definition of civilization as urbanism, writing, and government obviously marginalizes countless peoples and classes. The prominent twentieth-century archaeologist V. Gordon Childe emphasized hierarchy, specialization, urbanism, writing, empiricism, monumental art and architecture, state religion, and trade (Trigger 2003: 43). Current definition, as in John Bodley's popular anthropology textbook, claims that the "principle function of civilization is to organize overlapping social networks of ideological, political, economic, and military power that differentially benefit privileged households" (2011: 218); therein one has a strong brew of Marxism, world systems, network theory, and postcolonialism. Thus, there is something sobering and perhaps useful in not closely defining civilization because, as Mann put it, "the word has too much resonance" (1986: 73). In his broadly comparative view, the Phoenicians were a "narrowly maritime" and decentralized civilization (Mann 1986: 190–192).[27]

Generally, infusing the Phoenicians with current readings of civilization should be resisted, lest anachronism run amok. Anthropological, postcolonial definitions may simply not apply, especially if one follows Niemeyer (2004) and others who see Phoenician motives as peaceful and mercantile. By

contrast, remaining skeptical about civilization may help the historian resist the tropes of heroism and balance them against the possibilities of exploitation or at least acute self-interest. Postcolonial theory may suggest such a middle option: Could the Phoenicians, by transporting their civilization from a context of increasingly oppressive imperial regimes, have saved civilization (i.e., writing, urbanism, specialization, dominance, etc.) from itself, temporarily at least interrupting what it is capable of becoming at its worst?

Some would remove civilization from the discussion for historiographical rather than moral reasons. Horden and Purcell's *Corrupting Sea* (2000) launches an assault, as it were, on civilization, or at least the town as the proper locus of Mediterranean history. They reject Braudel, Peter Brown, and other historians who march to an urban beat, and with them world-systems theory and its divided modes of production that swallow rural peripheries in diagrams resembling interregional amoebas. Indeed, all forms of power or elite agency are absent from their analysis, and their rural Mediterranean seems transported from the cultural-ecology approaches of the 1960s and 1970s. How the Mediterranean became connected or unified is their main question, and topography the answer. Instead of Plato's pond, they offer a myriad of microecological zones, each one posing specific mortal dangers to the "frogs" adapting to them. A million zones for a million cultural adaptations, or lots of ponds and lots of frogs. Because wants and needs were not fulfilled by any of the local and limited microenvironments, the frogs got together to pool their resources. At some point in their story, as networks of trade developed, one might expect those frogs to turn into Phoenicians. But perhaps because they avoid urbanism, power, entrepreneurs, and civilization, Horden and Purcell do not make more of Phoenicians and their transformative feats.

William Harris and his colleagues do their best to restore agency in their rebuttal, *Rethinking the Mediterranean* (2005), but more work is required to reconstruct the connective and unifying role early Phoenicians played. As carriers of an urban culture that spread standardized value systems for encoding language and material wealth, they installed the first links and nodes of trans-Mediterranean networks of information and commerce. Too much is often made of the collapse of an interpalatial system in the early twelfth century BC that took down major centers and threatened others. However, neither civilization nor urbanism vanished. Much of it was not only saved but also transmitted. Instead of deploying civilization as monuments to dynastic greatness, as their neighbors were in the habit of doing, the Phoenicians used it to transform regions of disparate parts into a connected, plural whole. At this point, postcolonial theory perhaps saves us from turning Phoenician history into an epic poem by highlighting local agency and the high plausibility that the Phoenicians had many collaborators.

Colonial Encounters in Ancient Iberia (Dietler and López-Ruiz 2009) reinterprets Phoenician expansion within postcolonial guidelines that prioritize the indigenous. The editors warn that one should guard against interpretations based on outdated "diffusion of civilization" models, lest one unwittingly perpetuate discourses of domination (Dietler and López-Ruiz 2009: 300). Thus, the Iberian Peninsula was not a metalliferous periphery looted by Phoenician middlemen for their Assyrian masters in the core, but an arena where local agency helped set rules of commercial engagement, farming, and consumption of luxury goods. Seeing no evidence for either a discourse of domination or actual political domination, Dietler concludes that the Phoenicians did neither as they founded Iberian colonies and more ephemeral trading posts where benign yet profitable exchanges took place (Dietler and López-Ruiz 2009: 21–23). Other contributors to the volume chafe at the postcolonial framework: Arruda, for one, states flatly that "the colonizers subordinated the colonized, and elites from both sides helped" (2009: 27); and Treumann writes that her own take on Phoenician timber exploitation runs counter to the "Iberocentric" perspective of the proceedings (2009: 69). Despite its mission to reframe Phoenician colonization within current theoretical trends, it could be argued that the volume illustrates the resistance of complex topics to uniform models.

A second problem inherent to the construct "Phoenician civilization" is its first part, that is the elusive topic of ethnicity, which researchers now tend to avoid except as an aspect of identity. Archaeologists directly or indirectly follow Frederik Barth (1969), who clearly articulated that what most motivates groups to self-identify is differentiation against a perceived Other; over time a territory and self-appointed name or ethnonym should result. The Phoenicians probably self-identified by town, and Homer's "Sidonians" is an indirect witness of that practice. By also calling them *Phoinikes*, Homer authored the ethnonym and the toponym currently in use despite its problems (Sommer 2010; van Dongen 2010).

There is little consensus on how to match Homer's ethnonym to an archaeological culture that could be called "Phoenician." Moscati (1988) saw Phoenician-ness in their art and architecture, but this observation was mostly based on material postdating the eighth century BC. In the face of such hybridized material, Sommer (2010) basically abandons the notion of an identifiable Phoenician culture, defining them as a commercial collective instead. By contrast, Gilboa (2013) strives to retain ceramic indicators of Phoenician presence and influence, and through the closest possible study, has made Tel Dor the indispensable type-site for Phoenician pottery in the Mediterranean. Her work challenges the methodological mantra, "pots don't equal people," that prevents archaeologists from attributing ethnic character to ceramics unless context provides evidence of modes of consumption and practice. Susan

Sherratt (2005) cites the violation of this principle having produced unstable ethnic constructions for Philistines, Minoans, and Mycenaeans, and thus, she calls for more integration of texts.

While overreliance on texts has often been problematic in archaeology, Sherratt and Winter (1995) effectively demonstrate how Homer's characterizations of Phoenicians speak volumes about Greek self-identification. His *Phoinikes* and Sidonians bribe, kidnap, and are often wily, or *polytrupos* (as is Odysseus); they are also occasionally heroic, skilled, and profitable to know, or as Winter puts it, "grudgingly admired" (Sherratt and Winter 1995: 264). Meanwhile "the Phoenicians may well have been models for newly emerging Greek social roles," but by negative example viewed with "ambivalence and discomfort" (Sherratt and Winter 1995: 261). This anxiety came from the Greeks' own colonial adventure, their own transformation into something uncomfortably close to how they perceived Phoenician life, as overly entrepreneurial and unheroic. The Greek artistic emphasis on the heroic may be viewed in this way, which would explain, *inter alia*, the lack of merchantmen depicted on Greek vases, whose artists had no trouble painting warships. Thus, it can be accepted that Homer tells us more about Greeks than Phoenicians and attempts to put ethnic stereotypes aside. As a corollary, archaeologists must view functional definitions based on ethnic assumptions with suspicion; the "martial Greek" certainly traded in the Early Iron Age, and the "mercantile Phoenician" could probably fight. Meanwhile, if Greeks and Phoenicians were both using objects to express mutual differentiation, then one must hope that improved archaeological method, with its emphasis on materiality and social practice (Gosden 2004; Maran and Stockhammer 2012; van Dommelen and Knapp 2010), will define how assemblages of familiar ceramics and associated artifacts were used and consumed in the dynamic milieu of Greek-Phoenician interactions.

Seeing the Phoenicians through Greek eyes skews the perception of interactions that do not even involve Greeks. Looking at Iberian colonies in the eighth and seventh centuries BC has continually raised terminological issues, which Hodos (2006, 2009) has explored and Gosden (2004) deplored at length. Terms inherited from Ancient Greece, *apoikia* for "away from home" or colony, and *emporion* for trading post are employed imprecisely by ancient and modern authors. Most coastal settlements took advantage of sea to river junctures, especially ones protected by promontories or offshore islets,[28] but few sites can be confidently matched to the colonial lingo. As the legendary founding of Carthage would suggest, settlements might be arranged with local populations according to unpredictable terms. Thus, it would be better to adopt terms that contain fewer assumptions about hegemonic or territorial motives. Such is the concept of *middle ground,* a nexus of negotiated space and values that "acts as both core and periphery in geographic and social contexts, with an emphasis on mutual accommodation" (Hodos 2009: 222).[29] It is important

to note that Hodos's approach fits squarely within a postcolonial trend to view intercultural contacts in terms of material.

Postcolonialism dominates the *Colonial Encounters in Ancient Iberia* volume (Dietler and López-Ruiz 2009), whose editors blame world-systems categories and Greek typologies for fostering anachronism and ignoring agency.[30] Local agency is also foremost in *Material Connections in the Ancient Mediterranean*, which emphasizes hybrid spaces where entanglement produced hybrid identities and practices, and material expressions of them amounting to "new worlds" (Knapp and van Dommelen 2010: 6). A recent *World Archaeology* volume was also dedicated to "postcolonial archaeologies" (van Dommelen 2011), packed into which is a dissatisfaction with supposed dualistic structures of world-systems thinking and a greater interest in the more fluid patterns of action evinced in intersocietal contexts:

> Cultural hybridity is inherently associated with the twin notions of ambivalence and ambiguity, because these are the reason for the in-betweenness of many colonial subjects, who have links with both colonizers and colonized but are yet not fully part of either group … It is through the creation of this "third space" that hybridity displaces the histories that constitute it in the first place and through which it sets up new and potentially alternative structures of authority. Hybridity is thus potentially both liberating and subversive and can lay the basis for silent resistance. (van Dommelen 2006: 137)

Van Dommelen cites Homi Bhabha (1994) as especially influential here in terms of hybridity, though the language of liminality is even more prevalent. It is hardly coincidental, for Bhabha makes extensive use of liminality throughout his work, albeit without citing foundational works of either van Gennep (1908) or Turner (1969). According to Bhabha, "The contingent and the liminal become the times and spaces for the historical representation of the subjects of cultural difference in a postcolonial criticism" (1994: 256).[31] From a maritime archaeological perspective, a focus on ambiguity, hybridity, and liminality arrives overdue. Where Levantine presence, influence, or acculturation/orientalization is clearly manifest but unclearly defined, it should help archaeologists to see that hybrid material culture was adaptive and intentioned. Here ambiguity and departure from socially governed structures paradoxically become sources of power and agency.

A common critique of postcolonial theory includes a supposed failure to account for dominance, as pointed out by Cañete and Vives-Ferrándiz (2011) in the case of Phoenician presence at Lixus. Indeed, it seems plausible that these cultural bridges would be manipulated by dominant interests over time, and for Aubet (2006: 96) or Arruda (2009: 127), it is obvious from a world-systems view that mercantile elites drove the process and exploited the locals.[32] In terms of structural organization, Aubet, for example, sees one big colony

settled by Tyre at Gadir/Cadiz and many small, subsidiary trading posts; it was a centralized, hierarchical network. To ignore that is to be guilty of "sympathy" for the indigenous, as Aubet puts it (2006: 96). Does a search for winners and losers simply constitute "another relapse into essentialism" as Cañete and Vives-Ferrándiz (2011: 138) warn? Surely there is a middle ground as this approach goes too far toward ignoring *Realpolitik* altogether.

Through a lens of postcolonial and network theory, one is more apt to notice power that is less hegemonic and more resistive but real nonetheless. Landscape and seascape can be shaped into political actors, providing fertile matrices for information, power, even identity. Borrowing liberally from Barabási's 2003 seminal work on network science, *Linked*, Irad Malkin's *A Small Greek World* shows how residents in the larger Archaic Greek colonies became rapidly connected to the greater Mediterranean information network with the addition of just a few links that drastically reduced separation among existing nodes (2011: 215). This kind of connectivity made the whole Mediterranean a *middle ground* without core or periphery, and as he suggests, may apply to Phoenicians, Etruscans, Carthaginians, and Romans (ibid., 209). A key product of these network effects was Hellenic identity, the surprising point being that it was invented by colonists seeking commonalities in their middle grounds, not issued by the mother cities. Colonists came to Naukratis as citizens of Ialysos, Kameiros, and Lindos, but over time they became Rhodian and built a Greek temple as a material expression of that more communal identity (ibid., 209–210). Syracuse was a thriving Greek cosmopolis before Corinth, its metropolis, reached that point (ibid., 222). The Trojan War contributed to the Hellenic ideal through the *Nostoi* ("return" legends) following the shared experience of war abroad (ibid., 213).[33] These examples of "back-rippling" invert conventional notions of Hellenism, and by this logic, Greek civilization was born as a *Small World*, or "complex system … of decentralized, accessible, nonhierarchical, multidirectional, expansive, and interactive networks" (ibid., 208–209).[34]

According to Malkin's back-rippling model, the Levantine settlers should have rallied around or invented some group identity such as Canaanite, Amurrian, or Phoenician. However, evidence for such expression in the Early Iron Age remains vague. Phoenician identity looks practically oxymoronic next to the mountainous Greek evidence of self-identification. Tenth-century Phoenician temples at Kition and Kommos have Levantine precedents, and the later so-called Tophets or infant cemeteries were a western Punic phenomenon that did not reflect or influence burial practice in the Levantine homeland significantly (Hodos 2009: 228). Therefore, if back rippling is an important network effect, there should be a compelling reason as to why the Phoenician network appears not to have generated this effect. Returning to Barth and the importance of the Other may lead to a viable hypothesis. While the Archaic Greeks had the even more archaic Phoenicians and Egyptians to simultaneously

envy and denigrate in a reflective manner, it is hard to see Cypro-Phoenicians intimidated by any cultures they encountered in their early expansion. If one follows Moscati and takes architecture as an energetic display of identity, then the cultic structures at Kition and Kommos (and later at Carambolo[35]) may be taken as architectural statements of Levantine identity that were balanced with the material surroundings of their Greek hosts on Cyprus and Crete. However, it could be argued that such ostentatious structures further west would have been too provocative. The Phoenicians were long used to hegemonic neighbors intruding into their homeland, and it is conceivable that their own identity developed in opposition to this aggression. Of course, this hypothesis contradicts the intensely violent Phoenician identity postulated by Abulafia (2011: 81–83) and others who rely on Hellenistic and Biblical sources and, thus, deem the Phoenicians not much above congenital baby killers.

The most plausible notion pertaining to Phoenician identity remains that of the basically peaceful, mercantile sailor. This view is not inconsistent with two of Gosden's observations on Phoenician and Greek colonialism: firstly, that these "peoples" had no fixed ethnic identities as they came into contact with Others; secondly, that the colonial project dissolved all notions of value (material and social) in the interactions and negotiations that characterized it (2004: 64–71), again to the point that something new was created in these margins. Moreover, arguably, inherent to the sailing and trading way of life was the tendency to maintain balance and reciprocity, ethics inherent to the mutual negotiations theorized for the middle ground and antithetical to the more heroic and militaristic ideals of some of the cultures surrounding the Cypro-Phoenician sphere. In a *longue durée* view of Phoenician identity, one may plausibly suggest that by 1000 BC residents of Byblos, Sidon, and Tyre had 2,000 years of training in the politics of the middle ground. They were the perfect "people" to create a Mediterranean *small world*.

CONCLUSIONS: DEFINING POWER FROM THE MARGINS

Phoenician identity and colonial power relations need not be epistemological sirens, that is dynamic intersocietal processes doomed to description with dramatic oversimplifications and rhetorical questions. Within the fluid, liminal perspective of middle grounds, the enigmatic and ambiguous character of Phoenician expansion begins to make sense. Thus, hypothetically, the "Great Sea," stretching more than 2,000 miles from Gadir to Tyre, was not the product of an Assyrian world system but a *small world* after all, created in about 1000 BC in various middle grounds by Cypro-Phoenicians and their contacts. It was diffuse and decentralized, with no evidence for administration or governance, unless these can be inferred from the relative size of sites (Aubet 2006). Instead of taking that hierarchical approach, any Phoenician outpost with a temple

(either textually or archaeologically attested) can tentatively be classified as a nodal site, revealing a tenth-century BC network running through Kition and Kommos to Huelva, with myriad links and more clusters, such as Carthage, appearing in the ninth century BC. Phoenician power, as Mann (1986: 190–192) has already put it, was indeed maritime, diffuse, and decentralized, but hardly narrow.

The locus of power is central to the theorization of Phoenician political economy, whether one sees it driven by Assyrian demand in a world system or more heterarchically scattered among city-states, colonies, and trading posts where it was mutually negotiated in middle grounds. Hegemonic power appears to be something Bronze and Early Iron Age Phoenicians were subjected to but never imposed in any great deal. They had the sea, as is known; but that should not be the end of explaining Phoenician power as thalassocracy. As pointed out by Knapp (1993), thalassocracy was once a vastly overstated concept implying state control and a monopolization of routes, neither of which has gained much support from Bronze or Early Iron Age evidence. Similar to other essentialisms, it glosses over disorderly patterns of complex behaviors like colonization without explaining social dynamics. The real essence of thalassocracy is not control of the sea, but power gained through one's ability to float and to gauge the wind, to coexist among and within powerful forces.

Like Plato's frogs, the Phoenicians were amphibious and even more adept at flotation and princely transformation. As argued elsewhere for Late Bronze Age mariners (Monroe 2011), they were liminal experts, which would have made them powerful agents, or *affines* as such persons have been described by Mary Helms (1988, 1998). Kristiansen and Larsson (2005: 39–40, 45–54) have liberally adopted this idea to help explain the rise of Bronze Age aristocracies broadly:

> we propose that the rise of ranked and state societies during the Bronze Age represented the formation not only of new elites, skilled artisans and specialists, but of a new social and economic complexity .,, accompanied by a similar religious and cosmological transformation that granted the new skills and the accompanying new forms of long-distance travel an outstanding role in society. (Kristiansen and Larsson 2005: 60)

Moreover, they have described Bronze Age travel as a "distinct, ritualized activity" (ibid., 54). This perception as magical or hidden by the uninitiated would likewise attend the maritime merchant's use of balance weights and the invisible, mathematical standards wielded to determine values (Monroe 2009a: 39–47, 281).

This powerful notion of the Bronze Age traveler as affine applies equally well to the Early Iron Age Phoenician, especially when considering the Assyrian exploitation of Amurru. As Braudel (1982) or Bourdieu (1977) might observe,

the Phoenicians controlled the rules of the game, that is the logic of the social fields involved in creating and maintaining the information networks through which flowed wealth and power. As Campbell has noted in explaining complexity in Late Shang China (coincidentally the thirteenth through eleventh centuries BC),

> rather than determining which of two overarching leadership strategies characterized a given polity …, it would be more useful to identify local sources of power and understand their fields of production and mutual articulations (2009: 822).

This approach demands abandoning the state as one's analytical focus and instead mapping networks of power along the more fractured lines – ideological, economic, military, and political – drawn by Mann (1986: 190–194). In the Phoenician case, power pulsated in the margins. In the coastal petty-kingdoms, it was networked among temple, palace, merchant, financier, and seafaring expert. In the colonial situations, the sources of power were probably more fluid, resulting from the creation of third spaces or middle grounds that mediated the ambivalence and ambiguities of all concerned who had chosen such a liminal existence.

Postcolonial scholarship has put the emphasis on local or indigenous agency while arguably still leaving questions of choice underaddressed. Network theory could also be accused of reducing history to efficient, maximizing patterns of communication that determine outcomes regardless of individual choices. If the interests of parties involved in contact and colonization could be more fully modeled, then it follows that their mutual engagement and materializations – their newly created worlds – would become more intelligible. To help interpret the laconic evidence of choice, liminality reveals a matrix of risks, rewards, and anxieties that would shape decisions while living in hybrid, maritime contexts at the edges of political landscapes.

Van Gennep's (1908) rites of passage explained how societies could let individuals face challenging transitions without disturbing the waters of the many. In the liminal state, passengers could be free and powerful, skillful, magical, even supernatural in abilities. Victor Turner (1969) redefined society as a process that depended on an *anti-structure* to provide transformative thresholds where liminal *passengers* experienced inversions of society's rules and hierarchies, leaving them ambiguous and corrupting (Turner 1969: 94, 108–111) to normative society but accepted within a *communitas* (Turner 1969: 100) and, as previously mentioned, powerful and creative. All social systems, including small worlds and world systems, should exhibit such thresholds (Turner 1969:128–130). Semiperipheries and middle grounds, like the liminal condition, are thresholds – ambiguous and transformative. According to Bhabha, hybridity is liberating and subversive, setting up alternative structures of authority in those

third spaces or new worlds it creates (van Dommelen 2006: 137). Sommer (2010) sees the cultural hybridity of the middle ground as particularly advantageous to the expanding Phoenicians and their ability to attract contacts into market economies; meanwhile, Gosden (2004) sees the material wealth (raw metal, timber) drawing all peoples (settlers and indigenous) into colonial encounters. This is the economic, material counterpart to the more phenomenological aspects of living in liminal conditions. It is essentially Turner's ritual process but at work in colonial interactions. Hodos's (2006: 22) postcolonial approach to Early Iron Age colonization involving "a movement of people … who collectively identify themselves with a certain social coherence" (in a middle ground no less), essentially defines *communitas*. The presence of temples in Phoenician settlements abroad can be taken as attempts to mediate and focus the anxieties of being in a liminal condition. Wenamun certainly relied upon his Amun-of-the-Road to get him through an anxious time living in the port of Byblos (Lichtheim 1976: 225, 228). If given any historical credence, Elissa's flight to Carthage is also marked by cultic mediations, including sacrifice, taking Cypriot cult prostitutes aboard, and siting the Byrsa colony according to excavated omens (Justinus, *Epitome of the Philippic History of Pompeius Trogus* 18:5).

Liminality suggests that beyond motives of profit, flight, and survival, life in the colonies offered something akin to a heroic bonding experience, appealing to colonial and indigenous alike because they were both passengers in this marginal context. It held out the promise of various forms of social enrichment beyond the limits of the local, beyond whatever constituted the circumscribed agrarian potential. This process is something apart from the heroic conquests of myth, wherein chaotic waters, figuring as characters, must be confronted or defeated by the hero (Mills 2002; Monroe 2011), or in the cosmological emulation attempted in Ashurnasirpal's "subduing of the sea." However, killing a hippopotamus or two hardly compares to crossing the distance from Arvad to Tartessos or even to Kition. The Great Sea, if it noticed at all, was barely disturbed by Assyrian advances, and perhaps out of spite, bestowed its favor on those who chose to float on it rather than stab it. By driving the Phoenicians to intensify their colonization in about 800 BC, the Assyrians ironically strengthened the very networks used to resist them, and thereby made the *affinal passengers* more powerful still. Thus, the Phoenicians resemble perhaps the quintessentially liminal character of myth: the ferryman of the underworld, that unpredictable and fluid transformer. In terms of power, the class of Cypro-Phoenician venturers derived it first by radically expanding their networks into the west, and later adding substantial linkages within that trans-Mediterranean scope that served them brilliantly in the face of Assyrian oppression. In Mann's (1986) terms, their power in history derived mainly from economic (diffuse and decentralized as it was) as opposed to ideological, military, or political networks.

According to Turner, however strong the appeal of liminal status, structure always reasserts itself. Thus, a liminal view of Phoenician expansion cannot ignore the world system acting on it. The middle ground created by Phoenicians and their contacts was not part of the Assyrian plan for world domination, but it was susceptible to imperial violence in the east and to centralizing actors in the west. By 600 BC, old networks were becoming more hierarchical, and Carthage started looking more like the empire from which Phoenicians had escaped centuries earlier. Structure reasserted itself, building a small world *system* in the west, a bridge as it were to Rome and the end of a once small world.

NOTES

1 Sommer (2010: 135) recognizes as much, calling Phoenicians the "true protagonists of 'Mediterraneanism.'"

2 I am not denying that Assyrian pressure, which Broodbank calls a "causative conundrum" (2013: 491), played a role in the intensive Iberian colonization of the eighth and seventh centuries BC.

3 Niemeyer (2004: 246) already criticized the "Assyrian oppression hypothesis" on grounds that Phoenician expansion predates Assyrian oppressive policies. Faust and Weiss (2011: 193–199) marshal archaeological evidence that contradicts the "standard model" of a *pax Assyriaca* and Assyria-initiated trade being responsible for the development of a world system that determined the economies seen in the seventh-century southern Levant. In their sustained refutation, neither Assyria nor Phoenicia fit the roles (core and periphery or semiperiphery) assigned by the standard model, an argument with which I am in whole agreement.

4 Broodbank recognizes this temporal problem with the APP, that it fails to account for expansion of Phoenician contacts as far west as Carthage and Cádiz by the ninth century (2013: 489–491).

5 Aubet sees Phoenician expansion as markedly twofold, with a precolonial stage from the twelfth to eighth centuries, the "colonial stage proper" beginning in the late eighth century around the time of Sargon II (2001: 199, 352). Markoe similarly has a precolonial phase in the eleventh to ninth centuries (2000: 177).

6 See, e.g., Boyes (2012: 34) on the dubious reliability of Josephus's Phoenician history.

7 The dates are contested by proponents of the Levantine "low chronology" who also adhere more to traditional Greek ceramic typologies that tend to support it. For one view into this debate see Bruins et al. (2011) and Fantalkin et al. (2011) in *Radiocarbon* 53.1, where the difference amounts to about a half century depending on the dates attributed to Early Iron IIA Levantine ceramics found at Huelva.

8 The University of Groningen project has roots in chronological debates in early Iron Age Italy, where dendrochronology was already raising dates relative to traditional ceramic sequences (van der Plicht et al. 2009: 224–225).

9 Gilboa (2013), skeptical of much of the evidence for expansion before the ninth century BC, regards the Carthage C-14 dates as reliable because they were excavated from controlled strata. Thus, she supports the later-ninth-century dates proposed while questioning what Phoenician presence can be associated with the dated cattle bones (2013: 322–323).

10 Timaios of Tauromenion (ca. 300 BC) provides a date for the founding of Carthage as thirty-eight years prior to the first Olympiad or 813 BC; this comes as a fragment through Dionysius of Halicarnassus (first century BC, *Roman Antiquities* I:74, 1). Later Hellenistic historians cite Timaios as a reliable source for Elissa/Dido's founding of Carthage given his supposed familiarity with Phoenician sources (Baron 2013: 223–224). An anonymous treatise on fourteen outstanding ancient women preserves the earliest account, in Greek, where

she is known as "Theiosso": "Timaeus tells that she was called Elissa in the Phoenician language. She was the sister of Pygmalion, the king of Tyre. Timaeus says that she founded Carthage in Libya. For when her husband was killed by Pygmalion, she put all her riches on a ship and fled with some fellow citizens. And after she had suffered much, she arrived in Libya, and she was called Deido by the Libyans in their native language because of her travels. After the foundation of the aforementioned city, the king of the Libyans wanted to marry her, which she refused. Because she was forced by her own citizens, she pretended to perform a rite to absolve her of a vow: She built an enormous pyre close to her house and lit it. Then she threw herself from her palace into the fire" (*FGrHist* 566 F82, in Haegemans 2000: 279). Virgil (*Aeneid* 1.335–1.368) gives us the more familiar and full poetic legend by the first century BC, but by then it is corrupted by Roman sentiments, even more fully expressed in Justin's third-century CE Dido legend that adds details of the voyage and settlement, such as the stopover on Cyprus and ox-hide strips ploy used to acquire Byrsa (Justinus, *Epitome of the Philippic History of Pompeius Trogus* 18: 4.3–6.12).

11 A silver hoard at Dor dates clearly to the "opening" Stage 3 or Ir 1/2, though Gilboa et al. also note (Postscript p. 192), a "western silver" found at Tel Keisan dated to their "budding" stage 2, all of which suggests Levantine contact with Sardinia and the Aegean by their Ir 1b, which begins either in the late eleventh or early tenth century.

12 E.g., "[I]t is likely that Cypriot activities contributed a lot to the definition and spread of what are normally considered 'Phoenician' ways of doing things" (Broodbank 2013: 488).

13 This appears to agree with Broodbank (2013: 488): "[I]t is likely that Cypriot activities contributed a lot to the definition and spread of what are normally considered 'Phoenician' ways of doing things."

14 Following conventional Greek ceramic typology, Kourou dates T. 79 to Sub-Protogeometric (SPG) II or ca. 875–850.

15 This appears to agree with Hayne (2010: 155–156), who notes the Sardinian adoption of Levantine transport jar forms by about 900 BC.

16 Bass (1967) was among the first to suggest a specifically copper-oriented link between Sardinia and the Levant already in the LB. Phoenician presence on Sardinia in the LB (1300–900) is contested by Russell (2010: 106, 121), e.g., who argues for local production of Nuraghic culture, lack of LH IIIC imports, and Italian or Sicilian mediation of any Levantine imports. Van Dommelen (2006: 140) sees extensive contact with Cyprus by the thirteenth century BC, but no Phoenician settlement until the eighth century BC.

17 Recent ceramic and architectural discoveries under Cádiz have been dated to the ninth century BC (Zamora López, Gener Basallote, and Navarro Garcia, 2010, cited in Broodbank 2013: 489).

18 One might argue that Burak's location is, strictly on archaeological grounds and location, a testament more to Sarepta's strength or ability to resist hegemony. As Philip Boyes (2012) recently observed, the archaeological evidence available to date is insufficient to solve the matter of when or if Sidon, and later, Tyre, dominated their coastal neighbors in some form of early Phoenician confederation or dual kingship in the Late Bronze and Early Iron Age. These are textually derived constructs, which in Boyes's view are unconvincing due to their mainly Hellenistic and biased proveniences. Amarna Letters 148–150 are the only clear exception, although all they support is the fact of Sidon gaining control over Ushu, the mainland across from Tyre. The only credible attestations of dual kingships come with Assyrian administration in the eighth century and after, beginning with Luli of Sidon also ruling Tyre, or perhaps vice versa (ibid., 39). Regarding the archaeology of Ushu, Aubet's excavations on the Tyre al-Bass cemetery have uncovered burials dating from the late tenth to late seventh centuries BC, with more than 300 cremation urns used in a variety of ways that will be crucial for correcting outdated notions of Phoenician burial practices. Aubet (2010) sees the evidence as fitting a liminal pattern of rites involving cremation and consumption/feasting.

19 Those texts are conveniently translated in Hoftijzer and van Soldt (1998).

20 The tablet in question is RS 94.2406 (KTU 2.88), excavated in 1994. It has appeared in several publications since 2002 but its meaning as a seaborne itinerary was not questioned until 2009 in *Ugarit-Forschungen*, where Dietrich and Loretz suggest the quotidian "am Tag" (2009: 150).

21 Note this figure is reduced from what appears in Monroe (2010: 24), due to an error I made in interpreting the resin prices from Deir el-Medineh.

22 The Sumero-Akkadian spelling, ANSHE KUR.RA *sha* A.AB.BA, more literally denotes "horse of the sea," and obviously refers to a hippopotamus, making later Assyrian references to ivory from this beast reasonable. The swampy Levantine coast was well suited to Syrian hippopotamus, bones of which have been recovered from Bronze Age and Iron Age deposits in Israel (Faust and Ashkenazy 2009: 33–34).

23 The lack of reference to Phoenicia in the Annals after Assur-bel-kala and before Ashurnasirpal II appears to be not accidental but reflective of Assyrian priorities. To quote Liverani, "Ashumasirpal's program had already been conceived and partly fulfilled by his predecessors Ashur-dan II, Adad-nirari II and Tukulti-Ninurta II, so that the entire period 934–859 features as quite unitary in the political program, in the military activities, and in their literary recording" (2004: 220).

24 Wenamun's report begins with a date of year 5, either Rameses IX or Smendes I, so either 1095 or 1065 (Egberts 1991), i.e., the time of either Tiglath-pileser I or Assur-bel-kala.

25 For grain shipments to Hatti, see Bryce (2005: 322–323, 331–332, 341) but note that the supposed 2,000 kor shipment from Ugarit is reconstructed and unrealistically large (Monroe 2007). Bryce expresses doubts on the length and intensity of any drought, but he writes prior to publication of recent palynological findings. Merneptah's Karnak inscription (including the grain shipments to "keep Hatti alive," are now fully treated in Kitchen (2013). For grain strikes under Ramesses III, Vernus (2003: 54–61). On famine and economic hardship at Emar, see Zaccagnini (1995).

26 "The Great Sea of the land Amurru" appears as the western limit of Tiglath-pileser I's conquerings in Texts 15 and 17 also (Grayson 1991: 61–63).

27 Mann's assessment is based on adhering to Frankenstein's (1979) thesis and on Archaic Greek rather than Phoenician evidence.

28 Other Phoenician sites go far inland, up ancient river valleys like the Guadalquivir, and indigenous sites with quantities of Phoenician material are found in mining areas. Few, if any, sites have significant agrarian hinterlands.

29 Hodos and others rely on the middle ground concept as developed comparatively by Gosden (2004: 30 ff.), who vigorously rejects most prior approaches to ancient colonialism. Gosden also points out that the middle ground is much more a negotiation of values than of space or geography (ibid., 31).

30 Hodos (2009: 223) stands out in this scholarship by recognizing that what played out locally in contact situations could still be occurring within a more global world system.

31 This is one of many references to liminality in Bhabha (1994: 5, 64, 73, 212–213, 216, 222, 254, 274, 295, 340, 395).

32 In the Sherratts' (1991) model of evolving Mediterranean trade, elites dominated the process through monopolies on writing, luxuries, and maritime shipping. Added-value goods attracted new trade partners in a "contagious process" that spread from core to periphery.

33 A related aspect of Malkin's demonstration is the lack of state-level organization in colonial enterprises. It was more heroic, based on ventures led by individuals from independent polities, like Odysseus of Ithaca or Philip of Kroton.

34 A similar hypothesis, that Greek cultural identity formed outside Greece, forms an important part of Gosden's thesis that material actively shapes identity, indeed that wealth, not people, colonized the Mediterranean (2004: 61, 71).

35 For associated concentrations of cultic material at Coria del Rio and Carmona around Seville, see Belén Deamos (2009). E.g., the oxhide-shaped altar at Carambolo has ninth-century BC origins, while the Coria del Rio altar has five layers starting in the eighth century BC (ibid., figs. 8.4, 8.5, 8.6).

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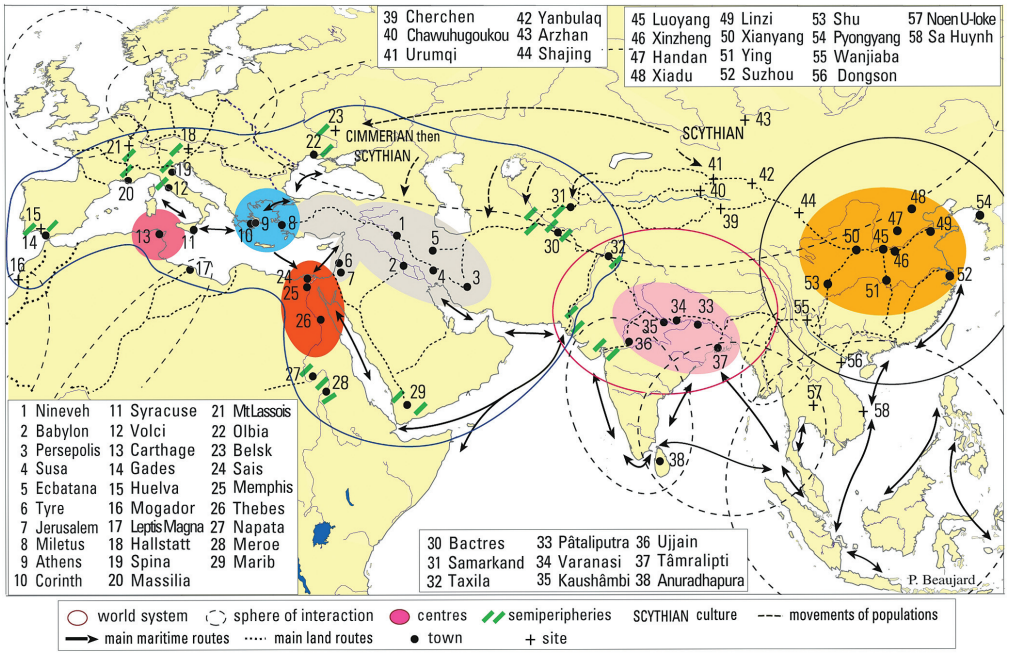
NINE

THE BIRTH OF A SINGLE AFRO-EURASIAN WORLD-SYSTEM (SECOND CENTURY BC–SIXTH CENTURY CE)

Philippe Beaujard

The collapse of the Late Bronze Age world-systems led to a period of political fragmentation, but a new phase of integration occurred during the Iron Age (Beaujard 2010, 2011). In the eastern Mediterranean, the demise of the centralized Bronze Age states allowed for the rise of political entities and groups who had previously been semiperipheral, primarily Cyprus in the twelfth and eleventh centuries, and then the Phoenician city-states from the eleventh century (Aubet 2001; Sherratt 2003; Sherratt and Sherratt 2001). After this period, ancient and new cores rose again in two world-systems: a western and an eastern (Figure 9.1).

It is important to note that a "world-system" is an area where exchange networks lead to the constitution of a transregional division of labor (which is not the case in a simple "sphere of interaction"). The system is hierarchized, and it develops following the rhythm of both economic and political cycles, which are also often linked to climatic changes. Contrary to I. Wallerstein's assumption, these ancient world-systems did not only trade luxury goods, but also heavy items, including agricultural products. The dominant cores exported manufactured products, especially textiles (silk for China, cotton for India [Bengal, Gujarat], linen and woolen fabrics for western Asia and Egypt), and imported raw goods and slaves from the peripheries. Cores also exported ceramics, glass (western Asia, Egypt, and later, the Roman world), metal objects (Western Asia, India, and China), beads (India), and so forth. Monsoons and



9.1. Afro-Eurasian world-systems from 750 BC to 350 BC.

TABLE 9.1 *Cycles in the Iron Age World-System*

Phases of growth	Phases of recession
Successive cycles in the Western world-system	
1000–850 BC	850–750 BC
750–450 BC	450–350 BC
350–200 BC	200–1 BC
Successive cycles in the Indian world-system	
Northern India	
700–200? BC	200–1? BC
Southern India	
200–1 BC	
Cycle in a possible Western Asian-Indian world-system	
Northern India	
350–200 BC	200–1 BC
Successive cycles in the Chinese world-system	
1000–850 BC	850–750/700 BC
750/700–450 BC	450–350/300 BC
350/300–50 BC	50–1 BC

strategic locations gave zones at the intersection of two subsystems a privileged position, hence the successes of Southeast Asia, Ceylon, Yemen, and Oman. In a position of interface between cores and peripheries, these semi-peripheries combined organizational and institutional characteristics of both of these two ends of the system's hierarchy.

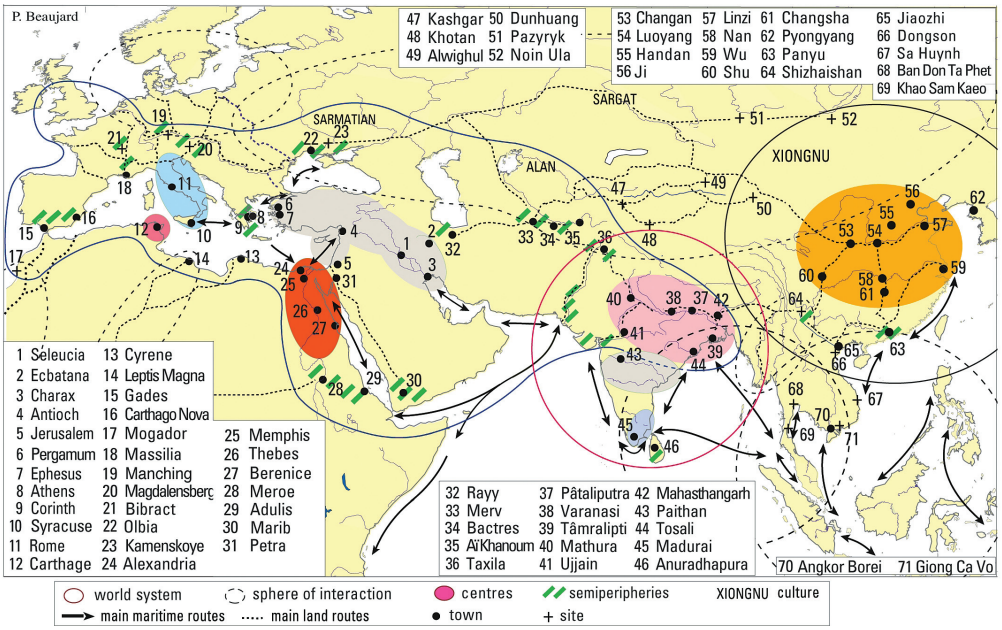
In addition, one could question Wallerstein's notion that the trade in luxury goods has no important systemic impact. Indeed, various authors have argued the opposite: that the circulation of luxury goods has structural implications because of their close connection to ruling elites, who wish to control them, any change in the supply of these goods having repercussions for political hierarchies.

Both Western and Eastern world-systems experienced three long cycles (see Table 9.1). Periodic recessions occurred in the West. They stemmed partly from climatic deteriorations around 800, 400, and 200 BC. For the Eastern world-system, centered on China, the first two cycles were clearly parallel to those of the Western world-system; this parallel does not necessarily indicate a fusion of these two systems, but it does point to the possible influence of global climatic factors. The third cycle seems to be quite different, as the Eastern world-system was growing at least until the mid-first century BC.

The growth of exchange networks and states in the first millennium BC was furthered by innovations (e.g., the expansion of iron metallurgy, diffusion of alphabets, and development of capitalist practices) and it favored innovations (e.g., the introduction of dromedaries in Africa, the concept of satrapies in the Persian Empire, the appearance of the first coins, and the invention of the crossbow, the stirrup, and blown glass). Populations from Central Asia were partly responsible for the spread of iron metallurgy to India and China at the end of the second and the beginning of the first millennium BC. Coins appeared in Lydia and China in the sixth century BC. It is noteworthy that innovations mainly appeared in core areas, but also in semiperipheries, for example in shipbuilding. Austronesians thus went to East Africa early in the first millennium BC, introducing banana, and perhaps water yam and taro (Blench 2009).[1]

In the crucial period from 700 BC onward, there were also ideological innovations with the birth of universal religions, the emergence of the individual, and the flourishing of a rationalist humanism in the Greek world. Different empires emerged in Western Asia: Assyrian, Babylonian, Persian, and Greek. They controlled regions between the Mediterranean and the Persian Gulf, which were later extended toward Arabia and Egypt, and the Indus and Central Asia. Moreover, an Indian world-system centered on the Magadha kingdom emerged around the seventh century, and it was partly consolidated into the Western world-system from the fourth century BC (Figure 9.2).

Map 2. Afro-Eurasian world systems from 350 B.C. to the end of the first millennium

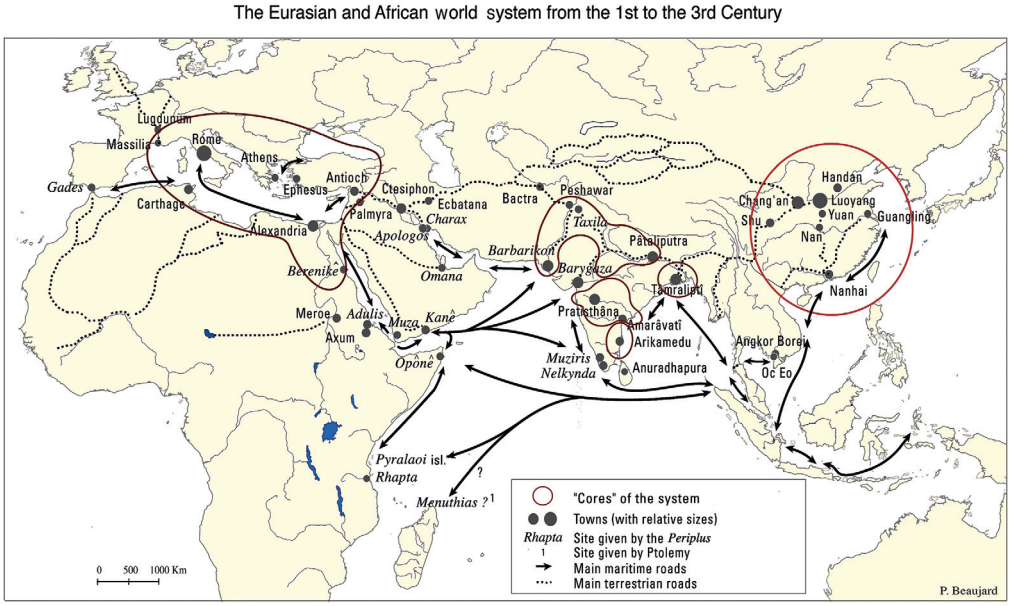


9.2. Afro-Eurasian world-systems from 350 BC to the end of the first millennium BC.

In China, a phase of concentration can be identified during the "Warring Kingdoms" from the fifth century BC. As was the case for the Greek city-states, competition encouraged innovation, development of thought, and economic progress. The reforms carried out in Qin allowed for the creation of a centralized state endowed with an efficient administration, which set up a powerful army. Qin managed to unify China in 221 BC. Subsequently, the establishment of the Han dynasty in 206 BC corresponded with a new phase of expansion for a unified China, where innovations and major projects encouraged the development of production and trade.

After the third century BC, the changes in western Asia, including the unification of China and of a large part of India (in this case by the Maurya dynasty), led to the rise of trade and cultural exchange across Central Asia and on maritime routes (see the rise of a Greco-Bactrian kingdom in about 250 BC, the findings in Pazyryk on the steppes,[2] and the findings in Ban Don Ta Phet and Khao Sam Kaeo in Thailand[3]). For Ray (2003), two major systems or spheres of interaction emerged in the second to first century BC: one in the Western Indian Ocean and one in the Bay of Bengal.

The growing interaction of the Indian system with Southeast Asia and China, which started in 300 or 200 BC, partly counterbalanced the decline of the Western world-system (marked by the recession of the Seleucid and Ptolemaic empires). The Mauryan Empire disintegrated in 185 BC; however, it



9.3. The Eurasian and African world-system from the first to third century.

seems that southern India was in a phase of expansion at that time. Moreover, the rise of new centers in the Mediterranean was combined with a growing integration of the European continent into the Western system. These developments foreshadowed the turning period of the first century AD, when the rise of exchange networks led to the formation of a single Afro-Eurasian world-system, stretching from eastern Asia to Europe and Africa (Beaujard 2005, 2012). These exchanges were not only an extension of government policy, they were also frequently the result of religious expansion and private enterprise.

In this world-system, the Indian Ocean held a central position. It would evolve until the modern era through four economic cycles, synchronized with political, social, and ideological evolutions, and often with climatic changes.[4] From one cycle to another, a demographic upsurge and the rise of exchange networks can be identified. The evolution of the system favored innovations, economic growth, market developments, state formation, urbanization, and a larger transregional division of labor.

In the first cycle, the world-system presented two main cores, the Han Empire and the Roman Empire, with some other cores in Central and South Asia (Figure 9.3). The birth of this system explains the movements of Mediterranean merchants toward South Asia and Africa (Begley and De Puma 1992; Casson 1989), the presence of Indians in the Persian Gulf and the Red Sea (Cappers 2006; Sidebotham 2011), and the journeys of Austronesians toward China or the Western Indian Ocean (Beaujard 2013). It also explains the

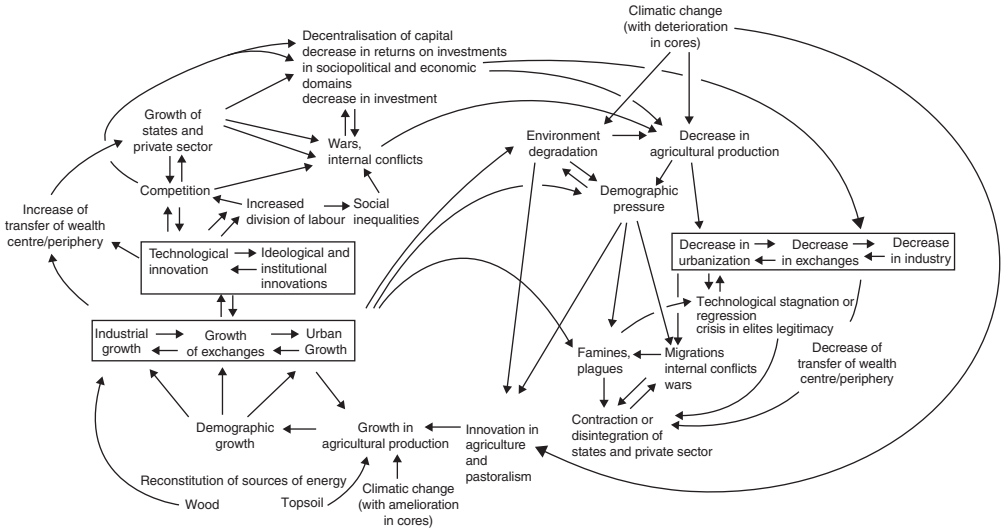
so-called Indianization of Southeast Asia and the formation of a pre-Swahili culture on the East African coast.

Roman imports stimulated and helped to transform the societies of the Ancient World, with exchanges of both goods and knowledge. Westerners largely paid for Indian trade by exporting gold and silver (Andreau 2010). The area between India and China, however, constituted the richest and most active part of the world-system. The expansion of Buddhist (Liu 2010; Ray 1994) and Hinduist networks coincided with the development of Indian trade, notably in the direction of Southeast Asia.

On the eastern part of the continent, the Han Empire expanded in Central Asia and Northern Vietnam, and trade developed on the Guanxi and Guangdong coasts. The Chinese did not often appear on the maritime routes, but Austronesians, Austroasiatic peoples, and, probably, Indians visited the Chinese coasts (Wang Gungwu 1998). Chinese chronicles mention the arrival of an embassy from Huangzhi (that is Kanchi, on the Tamil coast) in 2 AD, and then from Tianzhu, in North India, in 159 and 161 AD.[5] The Funan in Cambodia developed into a semiperiphery in this period (Malleret 1959–1963; Stark and Sovath 2001). The rise of exchanges favored internal developments of states, according to Smithian dynamics, and drew on institutional and technical innovations: iron plows with plowshares and moldboards in China in the second century BC; water mills, in China and in the Mediterranean; paper as a support for writing in China in the first century AD; and the invention of cement in the Roman Empire in the same period (Elvin 1973; Norel 2009; Scheidel 2009; Tempel 2002).

At the end of the second century, epidemics in Rome and the Chinese Empire marked the beginning of a recession in the whole world-system. From the third century, a global climatic cooling precipitated conflicts in the main cores, but these conflicts also had internal causes; among these, the overextension of the empires has often been emphasized. According to Joseph Tainter: "Investments in socio-political complexity as a problem-solving response often reaches a point of declining marginal returns … Once a complex society enters the stage of declining marginal returns, collapse becomes a mathematical likelihood" (Tainter 1988: 194–195). Moreover, the expansion of the state and of the private sector often led to the development of social inequalities.

The Han (220 BC), Parthian (226 BC), and Kushan (ca. 250 BC) empires disappeared almost at the same time in the first part of the third century, at which time the Roman Empire also disintegrated. Constantinople took control of Egypt and replaced Rome as the largest city in the world. The Byzantine Empire would remain a core of the system until the eleventh century, but the disintegration of the Western Roman Empire increased in the fifth century and Western Europe became a periphery of the world-system for



9.4. Cyclical logic in ancient world-systems.

almost a thousand years. Movements of populations occurred in the third and fourth centuries, and continued in the fifth and sixth centuries, with attacks of the Xiongnu on China and of the Huns on India, Persia, and Europe.[6] Data show a regression of the most populated towns in the world between 100 and 350 AD, notably in China (Chandler 1987). However, a demographic growth in India can be observed between 200 and 600 AD (McNeill 1998: 129).

In Asia, the Silk Roads, however, regained substantial activity in the sixth century thanks to the Sogdian merchants and their agreement with the Kök Turks ("Blue Turks"), who formed an empire in Central Asia in this period (de la Vaissière 2002). In addition, at the end of the sixth century, the unification of China by the Sui dynasty initiated a rebound in the world-system. Then, in the seventh century, two factors worked together to lead to a spectacular rise of production and exchanges in the world-system: the internal and external expansion of China under the Tang dynasty and the development of an Islamic empire that stretched from Central Asia to Spain (Beaujard 2012).

In conclusion, the systemic paradigm – with a transdisciplinary approach – provides a convincing interpretative framework for the data available for this period, even if insufficient quantitative figures do not allow us to precisely determine the level of integration between regions. The rise and demise of empires is best apprehended in the context of world-system(s) that evolve according to cycles induced by a variety of forces (Figure 9.4). It is important to note that as soon as it was formed, the Afro-Eurasian world-system was hierarchized through its exchanges. However, the hierarchies did not stay the same. Between the different phases of the system, a restructuring of the networks can be observed, while new powers emerged.

NOTES

1 References to shipments of cinnamon arriving on the Horn of Africa in the *Periplus* and by Pliny reveal the later interconnections between East Africa and the Austronesian world in the first century AD (Beaujard 2013).
2 Exchanges in Inner Asia developed between East and West and between North and South (see Koryakova and Epimakhov, 2007: 311).
3 See Bellina and Glover 2004; Bellina-Pryce and Silapanth 2006.
4 Jones and Mann 2004. Cycles in climatic changes seem to be connected to solar cycles, see, e.g., Crowley 2000; Wang et al. 2005.
5 From the *Houhanshu*, Hirth and Rockhill 1911: 113.
6 Temperatures seem to have been lower in the middle of the sixth century especially. Jones and Mann 2004; for China, An and Thompson, 1998: 20. On the relationship between nomads and China, see di Cosmo 2002.

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TEN

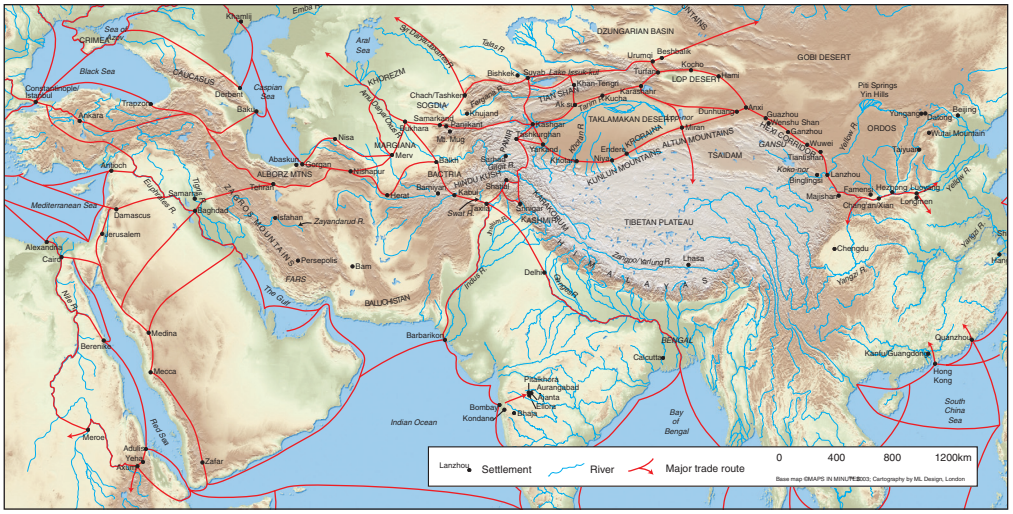
ON THE SILK ROAD: TRADE IN THE TARIM?

Susan Whitfield

BACKGROUND AND ISSUES

When the geographer Ferdinand von Richtofen (1833–1905) first coined the term "The Silk Road" (*die Seidenstrasse*) in 1877 it was in relation to the early period of purported trade between Roman Europe and Han China and referred specifically to the route described by Marinus of Tyre.[1] The interest in historical long-distance trade between Rome, India, and China continued with the studies of scholars such as Warmington (1928) and Raschke (1978), weighted toward the textual sources and concerned with both land and sea routes. Raschke, with an impressive array of footnotes and a dismissive attitude of the importance of artefacts (677), set about challenging several of the oft-repeated "facts" about Eurasian trade, among them that the technology of sericulture was guarded by China (622–623), that there was an imbalance of trade between Rome and China owing to the demand for silk (n. 256) and, most significantly for this chapter, the central idea of the Silk Road, significant and sustained long-distance trade in prestige goods.[2] He argued that the textual evidence suggested only small-scale and local trade and that, although monks carried and distributed prestige goods, they were not part of a trade network. He also argued that there was little Chinese state involvement in trade until the Tang period (618–907).[3]

Raschke accepts that there was prosperity in the oasis kingdoms of Central Asia but argued that this was a product of irrigation agriculture (640–641).[4]



10.1. Map showing the region and the lapis mine locations.

This is an argument also found among scholars questioning the extent of trade in the Roman Empire: "[T]he bulk of the population was involved with producing food and the main basis of wealth was agriculture. Village settlements were largely self-reliant and the scale of interregional trade was small. The status of traders was low and external trade involved only prestige goods for elite consumption" (Ray 1994: 1).[5]

A recent expression of scepticism in the extent of prestige trade is by Hansen (2012), arguing in relation to the Tarim and China. She concurs with Raschke in arguing that trade was small scale and primarily local (235–237).[6] She argues that prosperity came from the Chinese state in the payments to their military garrisons (237) (see Figure 10.1).[7]

The early link made by Richtofen between Rome and China with silk as its focus is, in some ways, unfortunate in that it has almost certainly distracted scholars from possibly more fruitful studies, for example, the examination of linked interregional networks trading in a large variety of commodities other than silk.[8] The absence of direct contact between Rome and China, the focus of Raschke's attack, is not evidence for the lack of interregional trade in prestige goods in Eurasia, yet it is sometimes presented as such owing to this literal linear interpretation of the "Silk Road" concept. Hansen (2012) also directs her arguments against what she terms this "conventional view" of the Silk Road.

As I have argued elsewhere (2007), rather than by giving validity to this linear interpretation, one that is easy to refute, it would be more useful to explore a broader definition of the concept. The alternative is to reject the term entirely, as Warwick Ball (2007: 80) suggests, but this would be both difficult, given its

common usage, and perhaps counterproductive.[9] It can remain useful in our present state of scholarship if it is defined clearly yet broadly.

In recent years, a historical archaeology approach has started to challenge some of the early arguments about the Roman-Indian trade links. Tomber (2008), for example, examines archaeological finds from ports to argue for trade through to the seventh century with active involvement of all the regional players, including the Romans. But her approach, relying heavily on pottery and coin types and their distribution, has yet to be applied to the Tarim states for this period.[10] The rich potential of isotopic analysis is also in its infancy in this area. It would be rash, for example, to dismiss the glass finds on the Tarim as non-Roman, as Raschke does (628), now that there are new techniques available.[11]

This chapter takes a historical archaeology approach, but considering built structures rather than pots or coins, namely the Buddhist temples and shrines of the Tarim region. It is not theoretical but speculative, recognizing the need for further systematic studies in economic history, material culture, archaeology, linguistics, and textual studies and transmissions. It is intended to build on studies – such as that of La Vaissière (2005) – that have sought to change the geographical focus of the "Silk Road" debate from the Europe–China east–west linear axis to a Central Asian interregional hub with the north–south networks also playing an important role. Although not addressing the debate prompted by a world-systems approach as to the nature of pre-thirteenth-century BC world systems, it notes that the Tarim is usually a void on the map in these debates.[12] There is certainly, in Beaujard's terms, a "sphere of interaction."[13] The primary intention of this chapter is to argue that the weight of material and textual evidence is still best explained by sustained interregional trade in high-value goods and that this explanation cannot be dismissed without more compelling and contrary evidence. The archaeological remains have been chosen because, although inevitably partial, they are plentiful, spread throughout the region, and well documented, thanks to the early explorers and more recent archaeology.[14] Although there remains little consensus about dating, this disagreement is not pertinent to the main argument of this chapter.[15] This chapter is also focused on interregional trade between the Tarim and lands to its west, rather than with China to its east – the latter the main focus of Raschke and Hansen.

The importance of Chinese traditional textual sources is recognized. However, given that, as Holcombe notes, "[T]hree subjects that mainstream traditional Chinese historians seldom addressed were trade, Buddhism and foreigners" (1999: 285), their relevance to this discussion is of limited value. Further evidence is required to understand the extent of any distortion and make the necessary adjustments to the Chinese historiographical lens. Other texts, such as inscriptions and the Buddhist biographies and manuscripts in the many languages of the Tarim, are also an important source.[16]

THE MATERIAL EVIDENCE 1: BUDDHIST SHRINES OF THE TARIM

The Tarim Basin, about twice the size of Sweden, covers an area larger than any European country apart from Russia. But much of Tarim is uninhabitable desert and settlements are located on the northern and southern edges of the Taklamakan where meltwater from the mountains creates rich oases. During the first millennium AD, the major oases were the capitals of small kingdoms. They were culturally, linguistically, and politically distinct, although all subject to periodic incursions and control by the empires on their peripheries: the Kushan, Chinese, Tibetan, and Turkic (and others thereafter). The kingdoms were centered on Kashgar (Shule), Khotan, the eastern Taklamakan and Lop Desert (Kroraina), Turfan, Korla, and Kucha.[17]

The area is rich in archaeology owing to two factors. Firstly, many of the ancient settlements, especially in the south, were abandoned over time probably owing to changing watercourses making them unviable. The abandoned structures were covered by the desert sands; new settlements were built elsewhere thus ensuring the originals were not built over or pillaged for materials. Secondly, the arid nature of the desert enabled preservation of organic materials. However, in the north, the ancient sites are closer to newer settlements and have suffered more from looting and reuse of their material for building and agriculture. Throughout the regions, the relic chambers of stupas have all been broken into and almost the only remaining finds are votive offerings of manuscript fragments.[18] The scouring effects of the wind and sand along with flash floods have also destroyed much. For archaeologists, there is the difficulty of excavating and dating in sand. In addition, many sites almost certainly await sifts in the dunes to be discovered. However, there remain more than forty stupas discovered to date and fifteen cave temple sites, the former found in all the Taklamakan kingdoms, the latter almost exclusively in the northern kingdoms.[19]

The stupa, probably originating in India in about the third century BC, was a funerary mound covering relics of the Buddha or his disciples. Its function widened over the course of the following centuries: Some cover objects used by the Buddha or his disciples; others commemorate actions or events in the life of the Buddha and his disciples; while still others symbolize aspects of Buddhist theology or are built as shrines. In all cases, however, the stupa was a focus for ritual, including circumambulation. Stupas often occur together in groups and were also incorporated into Buddhist monasteries and cave temples.

The transmission and development of the stupa in the Tarim is a topic I have discussed elsewhere (2019) and so I will only summarize the conclusions here. In Gandhāra and Central Asia starting from the second or first century BC but especially from the first few centuries AD, a development of the stupa can



10.2. Stupa M.III. at Miran with robber's hole. Photographer: Vic Swift. The British Library, Photo 1187/2(167).

be observed from its classical Indian form – a hemispherical dome on a circular base – into a variety of diverse and more complex forms. The stupa was heightened, both by being placed on bases, usually square and increasingly multistoried, and by the verticalization of the dome from a hemisphere into a parabolic or egg shape. It also becomes more massive and complex, with the bases becoming taller and more adorned and ornamented.

Some of these developments took place progressively and some seemingly in parallel and all emerged over the course of a few centuries across Gandhāra and Central Asia. Some seem clearly to be based on textual authority. For example, Kanishka's stupa at Shāh-jī kī Ḍherī in the Peshawar Valley, Gandhāra; Top-i-Rustam in Balkh, Afghanistan; and the Bhamala stupa at Taxila all show a development of the original square base into a cruciform shape owing to the addition of staircases protruding out from the base on each side. This follows a scriptural description found in the third-century *Divyāvadāna* that describes a stupa as having four staircases, three platforms, an egglike dome, as well as the other usual elements.[20]

The stupas in the Tarim show a similar diversity of forms over the same period, starting from the classical type on a circular base, such as at Topa Tim near Kashgar and shrines M.III. and M.V. at Miran (Kroraina), through to the four-staircase form, seen at Rawak in Khotan, and the tower stupas at Turfan (Gaochang, Sirkip) and Subashi in Kucha (Figures 10.2 and 10.3). Stein noted
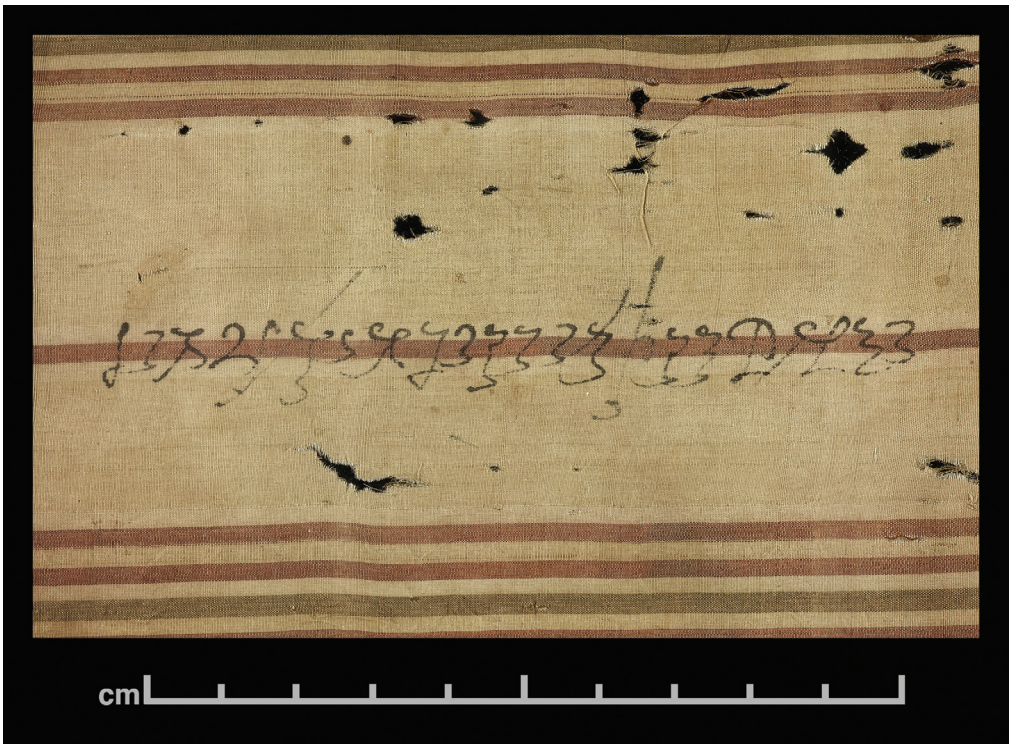


10.3. One of the stupas at Subashi, on the east bank. Photographer John Falconer. The British Library, Photo 1125/16(671).

the interregional similarities on his first expedition, particularly in relation to the three-story square-based form: "The identity of this feature only helps to emphasize still more the close agreement which exists in regard to general architectural arrangement between all the Turkestan stupas examined by me and the corresponding structures extant in the Kabul valley and the Indian north-west frontier" (1907: 83).[21]

ARCHITECTURAL DIFFUSION

Architectural diffusion requires a certain level of infrastructure in the receiving cultures and transmission must always involve complexity.[22] Both pragmatic and cultural memory might be involved in transmitting architectural styles.[23] Building descriptions found in textual sources, such as the one discussed previously, and the emulation of paintings and artifacts could also have played a role.[24] While traditional stupas are not particularly complex architecturally, the builders would also have had to gain knowledge of working with earth and brick to form monumental structures.[25] Apart from builders and patrons, the construction of a stupa would also have involved the support of the local authorities and the community.[26]



10.4. Detail of a large silk piece found on the Miran M.III. stupa showing one of the dedications in Gāndhār in script. The British Library, Or.8212/190.

Little study has been made of any of the logistics of architecture in the Tarim.[27] There were settlements here since at least 2000 BC with sophisticated grave culture (using wood) but little above-ground architecture is extant or studied.[28] From the second/first centuries BC, there were walls, beacon towers, and other military buildings built by the Chinese armies with tamped earth, tamarisk, reeds, and wood for strengthening, sun-dried bricks, and mud plaster.[29] Stone is not readily available although used for steppe tombs to the north of the Tianshan and Chinese tombs in the east. It is reasonable to assume that local builders were accustomed to using reinforced tamped earth and sun-dried bricks for large structures, but the stupa is a new and more complex style of building.[30] Their emergence and number strongly suggests that those with knowledge of stupas – both how to build them and their purpose – moved into this region and that Buddhism was established in some of these early Silk Road kingdoms by the first few centuries AD.[31] Even if some of the early patrons were not local, shrines are not built without a community to maintain and worship at them (Figure 10.4).[32] Faxian, for example, who travelled from AD 399 to AD 414, mentions that a community of a thousand monks and their disciples were associated with a stupa holding a Buddha tooth relic.[33]

Although there is little evidence of the inspiration and process of building in the Tarim, there is evidence of the involvement of monks in Buddhist architectural transmission.[34] The Chinese *Biographies of Eminent Monks* devotes a chapter to monks who gain merit, many through building stupas.[35] Chen discusses the building of an ordination platform in AD 754 in Tōdai-ji, Kyoto, with the emperor as patron and a monk, Gaijin, as architect. Gaijin designed it after an ordination platform he had seen in the Chinese capital Chang''an (present-day Xian), that of Daoxuan. Moreover, Gaijin recorded that he also had Daoxuan's text *Illustrated Scripture on the Ordination Platform* (Chen 2007: 101–102). The Chinese monks who travelled in the Tarim reported several accounts of local stupas being built on the demand of monks from foreign lands, such as one near Khotan patronized by the king.[36] There is also the case of Xuanzang who, on his return to Chang'an in 645, requested the building of a stupa in Chang''an (also with imperial patronage) modelled on that of King Kanishka (Wong 2012). These examples show that, in some cases at least, monks acted as the transmitters and designers of new architectural forms and that these forms were intended to act as a link with an existing tradition in another region.[37]

The emergence of new forms of growing complexity of the stupas in the Tarim and their stylistic affinity to those being built across the mountains to the west suggest multiple active and sustained dialogues between the Gandhāran and Bactrian communities and large, local Buddhist communities. They also suggest Buddhist communities in the region were receptive to new styles of stupas, presumably described by travellers or texts or shown in models or paintings. The evidence from the archaeological remains of sizeable and active Buddhist communities is supported by textual sources. A third-century Chinese history records a thousand Buddhist stupas and temples in the ancient city of Kucha.[38] The account of Buddhist activity in Khotan by Faxian records tens of thousands of monks, great monasteries, gold and silver statues, and the existence of small stupas in front of the residents' doors (Legge 1965: 16–17). It is recorded that three thousand Buddhist monks moved from the Tarim to settle under the Northern Wei (386–535).[39] The continued transmission and translation in local languages of Buddhist texts also supports the strength and continuance of these interregional links.[40]

BUDDHISM AND MERCHANTS IN THE TARIM

Although some scholars might question the timings of the growth of Buddhism, there is a consensus that by the third and fourth centuries Buddhism was established and flourishing in the Tarim kingdoms.[41] This presence is supported by the textual evidence – even the Buddhist-blind Chinese histories – of the archaeology, art, and architecture. They all point to a large Buddhist population with the surplus wealth that enabled patronage to build and maintain

the stupas. There are two issues that will be discussed first, namely the motivation and means for Buddhists to travel across the Pamirs: Why and how did Buddhists travel through the Tarim?

One answer to the question "why?" is relatively straightforward: namely, as missionaries. Buddhist missionary activities were given impetus and state sanction under King Aśoka (304–232 BC), who patronized Buddhism after his defeat of Kalinga and vowed to disseminate his faith throughout the world. According to tradition, he sent his son and daughter to Sri Lanka and prominent monks to then Afghanistan, to west Asia and the near east, to East Asia and Southeast Asia. Inscriptions above cave temples in Sri Lanka support the arrival of Buddhism in this period. From the earliest period, therefore, Buddhism was a proselytizing faith with a precedent for long-distance travel.

There is no evidence for the arrival of Buddhism in the Tarim during King Aśoka's reign, and the impetus and conditions for this propagation eastwards seem to have occurred under the Kushan Empire (first to fourth century AD).[42] The Kushans had close links with the kingdom of Shule at Kashgar and their influence is seen across to Khotan and Kroraina.[43] The Kushan rulers, although probably not Buddhists, were supportive of the religion and from the start patronized the building of stupas, notably that of Shāh-jī kī Ḍherī near Peshawar by Kanishka I (Dobbins 1971). Buddhist monks could take advantage of the security enabled by the diplomatic and military links across the Pamirs by the Kushan to spread their message eastwards to the Tarim states.[44] As Buddhism became established, monks and lay-believers traveled for other reasons: for pilgrimage, to source new texts, and to learn from teachers.[45]

This raises the second question: How were the Buddhist missionaries supported as they moved into and across the Tarim?

By this time, Buddhism had developed monasticism in which, in theory, nuns and monks rejected worldly goods and were reliant on donations from lay supporters.[46] The supporters acquired religious merit that could be shared with others. From the start, merchants and rulers were both courted by Buddhist communities. In return for donations, they would be offered safe travels and refuge en route, along with status and legitimacy. "Buddhism legitimated private commercial wealth as a vehicle for serving sacred needs through generous donations, and Buddhism lubricated foreign exchange by overcoming local prejudice with a radically more cosmopolitan, international perspective" (Holcombe 1999: 280).[47] This link is confirmed in early Buddhist literature, including the story of the Buddha's first two lay disciples, Trapusa and Bhalika, both merchants. They received relics of the Buddha's hair and nails to be enshrined in stupas in their home countries.

The lack of a desire to interfere in the management of political authority by the Buddhist community in this period undoubtedly helped this cosmopolitan perspective: Believers looked to creating a Buddhist civilization that

transcended state boundaries. This "portability across cultures" undoubtedly provided some security against political change: Buddhism continued to grow in Central Asia despite the lack of support by many of the regimes (Lam 2013: 444).[48] The dependence, or otherwise, of Buddhism on the apparatus of states and, by extension, the importance of state apparatus in interregional cultural transmission is worth further discussion, although beyond the scope of this chapter.

But the close link with merchants was a factor in the success of this interregional growth (Neelis 1997). The Buddha was known as the "Great caravan leader" (*mahasarthavaha*) for his role in protecting and leading followers from the world of saṃsāra to the world of enlightenment. The Buddhist teacher Nagasena explains to King Menander of Bactria that the Buddha "is like a caravan owner to men in that he brings them beyond the sandy desert of rebirths" (Rhys-Davids 1890–1894: 274).[49] Xinru Liu observes that "Abundant experience with long-distance trade provided the inspiration for these images of the Buddha as a guide for travelers and merchants" (1997: 114–115). The bodhisattva Avalokiteśvara became the patron saint of seafaring merchants and appears in depictions of chapter 25 of *The Lotus Sutra* on the cave walls at Dunhuang, for example, protecting merchants traveling by land and sea from bandits and sea monsters, respectively.

Ray (1994) and Holcombe (1999) have shown the links between trade and the spread of Buddhism across India and to Southeast Asia and Japan, respectively.[50] This research is currently being extended by the Buddhist Maritime Project.[51] This endeavor involves the Archaeological Survey of India working with scholars to map the clusters of monasteries found around trade ports and their hinterland.

The relationship with Buddhism went further than traveling companions. Scholars have noted the involvement of Buddhism in pawnbroking, usury, and investment of wealth.[52] Although monastic rules did not allow private wealth, this rule was clearly sidestepped by many: Holcombe gives an example of a Chinese official who extorted several million cash (copper coins) from one monk (1999: 282). There are also numerous manuscripts from the Tarim where monks are involved in contracts. As Gernet points out, "donation and usury – two conflicting practices – became the two principal sources of the Buddhist communities' wealth" (1995: 163). He cites a passage from the *Sarvāstivāda Vinaya* to show how some goods were used as endowments with the interest going to the Buddhist community:

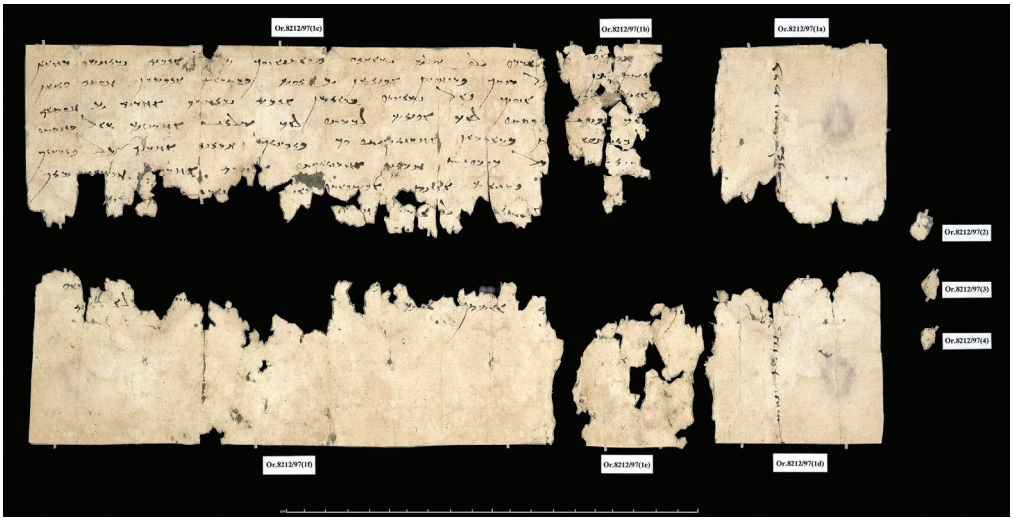
> The merchants of Vaisali sold stupa property for profit in order to pay homage to the stupa. These merchants, about to depart to distant countries in order to enrich themselves, had goods belonging to the stupa in their possession. They said to the bhiksu: "Reverends, this stupa property

> you ought to use to earn interest to pay homage to the stupa" … The Buddha declared: "I authorize the lay servants of the monastery as well as lay believers to draw interest from the property of the stupa in order to pay homage to them." (163 n. 33)[53]

Therefore, throughout south and Southeast Asia we see a symbiotic link between Buddhists and merchants, enabling both the spread of Buddhism and the growth of trade through this region. If there were merchants making the journey by land through Kushan to the Tarim kingdoms, then this pattern of behavior should have been continued, unless it were not possible. Indeed, some textual sources also show a link between the Buddhists with merchants and rulers in this area. For example, as mentioned previously, Songyun records the local story about the founding of Buddhism in Khotan when a merchant introduced a monk to the king. The monk subsequently built a stupa with the king's patronage.[54] In addition, Walter (1998: 5) and Ghose (2008: 13) discuss the case of Kucha where the ruling elite was the first to absorb and propagate Buddhism. The king of Kucha is reported to have made a golden throne for Kumārajīva and the kings from afar offered to prostrate themselves to enable him to climb up when they came to the ceremony for the initiation of his former teacher into Buddhism (Ghose 2008: 13).

Scholars do not dispute the existence of traders in the Tarim. The question lies as to whether this trade was primarily small scale and local, or whether it included sustained interregional prestige trade.[55] There is evidence for such trade between the Tarim and China for a period before the Silk Road, seen in the Chinese demand for Khotanese jade and its widespread use throughout the kingdoms of preunified China.[56] However, there is little evidence to support similar sustained trade between the Tarim and its other neighbors across the Tarim before the Silk Road period.[57] In terms of those leading the trade, much recent scholarship has concentrated on the role of the Sogdians.[58] There is also evidence for the presence of other traders, such as Jewish Radhanites, Persians, Indians, and other Central Asians, but Sogdians are believed to have been dominant in the Tarim region (Figure 10.5)[59]

Although evidence for Buddhism in Sogdia at this time is disputed, Sogdian merchants would have been in regular contact with Buddhist culture through their southern routes to the borders of India.[60] Whether they traveled into India or traded with Indian merchants on the frontier is not relevant, they would have passed through Buddhist lands on their way and encountered Buddhism. Some of the other merchants traveling with them seem to have been Buddhist.[61] In addition, the Buddhist Sogdians living outside Sogdia might also have attached themselves to the Sogdian merchants while traveling through the Tarim.[62] Information about several such figures exists because of their importance in spreading Buddhism in China.[63] La Vaissière (2005) hypothesizes that their



10.5. A Sogdian letter dating from AD 313–4 mentioning silk. The British Library, Or.8212/97.

importance might have been due to the fact that such monks were from merchant families and were more inclined to journey into the Tarim. While there is little evidence of anti-Buddhist sentiment in Sogdian society, the question remains as to whether they would have supported Buddhist monks wishing to travel with them either as protectors, patrons, or both. They might have been more inclined to support fellow Sogdians. There is also evidence of merchants who converted to Buddhism, such as An Xuan. He arrived in Luoyang in Central China in AD 181 as a merchant and there became a monk.[64]

Although nowhere near conclusive for support and patronage, there is no evidence that merchants from Sogdia, sometimes traveling with merchants who were Buddhist, would have shunned the company of Buddhist monks who wished to travel with them to spread their message. It is a potential scenario although far from proven.[65]

There is also the question of support and patronage when monks arrived in local towns. Many of the monks probably traveled no further than the Tarim, settling down there or at least spending sustained periods in the local communities.[66] In the early days before there were large monastic communities, the monks would have required support. In South and Southeast Asia, rich and influential merchants introduced monks to local rulers, leading to patronage. As discussed previously, there is certainly evidence of early links between Buddhism and the ruling elite. While more research is required, the paucity of sources will probably mean that any conclusions remain speculative and to some extent based on models from Buddhist expansion elsewhere.

The Sogdians are mentioned as early as in an inscription of Darius the Great as the source of semiprecious stones such as lapis lazuli. This fact brings us to

the second part of the material culture under consideration, the existence of extensive areas of Buddhist paintings in both stupas and cave temples and the materials required for their production.

THE MATERIAL EVIDENCE 2: PAINTINGS OF THE TARIM

Liu has argued that the role of merchants for Buddhists was more than as patrons and protectors, that they were also essential for the supply of the goods required for the practice of Buddhism (1997, 2009). Specifically, she argues that demand for the seven Buddhist treasures (*saptaratna*) stimulated long-distance trade between Northwestern India, Central Asia, and China.[67]

The seven treasures, or jewels, were materials high in value but low in volume, such as gold, silver, crystal, lapis lazuli, carnelian, coral, and pearls. Such materials are intrinsically valuable and suitable for long-distance trade by land, and Liu suggests that their Buddhist ritual value may have augmented their economic as well as their spiritual worth. Because Buddhist devotees sought these items as suitable donations, the links between long-distance trade and Buddhist monastic networks were strengthened. This created and sustained the demand for these commodities between India and China during the first to the fifth centuries AD.[68] The processes of expanding lucrative long-distance trade networks and the long-distance transmission of Buddhism were mutually reinforced.

The seven treasures are found in the reliquary chambers of stupas and were used as offerings and for decoration of stupas. The Tarim stupas contained relic chambers, as did their Gandhāran and Bactrian prototypes, but all the former had been robbed before their excavation in the early twentieth century. However, the contents of relic chambers in Western Central Asia and the Famen Temple in China make it a reasonable assumption that these stupas, especially the monumental structures such as Rawak, would have contained high-value goods brought from a distance, including the relics housed in caskets made of the seven treasures and wrapped in fine silk (Figure 10.6).[69] Liu's argument could be extended to explore the materials required for the paintings in stupas and in particular, in cave temples that survive in large numbers in this region.

Stupas with ambulatories, such as in the Tarim sites of Miran and Keriya, can be considered as simple temples. The ambulatories of stupas and temple walls incorporated wall paintings, as seen, for example, at stupas in Miran and at temple sites in Keriya and Khotan.[70] Most of these are fragmentary, but large areas of wall paintings survive in the cave temples of the Tarim and Hexi.[71] In the Tarim, the sites are predominantly in the north, probably dictated by the topography with water-cut gorges suitable for cave excavation close to the places of population, such as near Kucha and Turfan. The sites of population in the south, such as Khotan and Kroraina, were more distant from mountains



10.6. The stupa at Rawak, showing layered base and remains of the stairs. Photographer Vic Swift. The British Library, Photo 1187/2(255).

and the mountains more barren making sites unsustainable. The sites continue along the Hexi corridor, notably at Dunhuang, Maijishan, and Binglingsi, into Northern and Central China. Yungang (mid- to late fifth century) and Longmen (late fifth and early sixth century) are the most renowned examples, both built under the patronage of the Tuoba rulers of the Northern Wei.

The caves in India, Central Asia, and the Tarim were richly decorated with paintings and sculptures. The paintings covered all the walls and ceilings, representing a considerable area. For example, it is estimated that the paintings in the Dunhuang Mogao caves in the Hexi corridor just to the east of the Tarim cover 45,000 m^2 (Figure 10.7) and those at Kizil (Figure 10.8), one of the fourteen cave sites in the region, originally covered 10,000 m^2.[72] These are produced in fresco-secco, painted onto dry plastered walls.[73]

Both inorganic and organic pigments were used, although there was regional variation. The caves in Kucha, for example, show red from vermillion and red ochre, green from copper minerals such as atacamite, and gypsum for white (Li 2010: 49). From Dunhuang, all of these pigments were used in addition to azurite, minium, other copper compounds, and organic compounds such as indigoid, lac, and various yellows (Wong and Agnew 2013: 169–177).[74]

Some of the sources for the pigments were not available locally and several were from mines in the western Tianshan and the Hindu Kush.[75] Notable



10.7. Detail of paintings on the south wall of Cave 45 at Dunhuang Mogao showing merchants attacked by bandits and calling on the help of the bodhisattva Avalokiteśvara. Courtesy of the Dunhuang Academy.



10.8. Buddhist cave site at Kizil. Photographer Aurel Stein. The British Library, Photo 392/34(236).

is lapis lazuli that we see used in caves from Ajanta and elsewhere in India, through to Bamiyan and then to Kucha, Dunhuang, and Maijishan (Artioli et al. 2008; Chandra Set 2010; Gettens 1938a, 1938b; Li 2010: 49–50). Lapis was mined in what is now eastern Afghanistan (Figure 10.1) and was exported westwards from an early date, although there is little evidence of pre–Silk Road use in the Tarim or China.[76] The "extravagant use" of a pigment well known in Europe as being more valuable than gold, immediately struck the German archaeologists who subsequently removed many of the paintings from Kizil.[77] There is plentiful evidence that lapis was also highly valued in this area and commanded a high price (Figure 10.9).[78] Lapis was also used as one of the seven Buddhist treasures and it is probable that its use as a pigment in the Tarim cave temples was introduced by Buddhism.[79] But it soon started to be used in a secular setting, such as on painted pottery tomb figures in a tomb in Luoyang, central China, of the Northern Wei dynasty.[80]

The Tarim caves continued to be excavated, decorated, and renovated from at least the fourth century and for a thousand years.[81] The scale and constant rate of cave building – and stupa and free-standing temples decoration – would have required a steady and secure supply of pigments or the material to make them.[82]

Even at a conservative estimate, this represents a considerable supply at a considerable cost.[83] Both need to be considered. Patrons of the caves – whether local rulers, guilds of merchants, pious laypeople, or monks and nuns – had to ensure the materials were available for the artists. A sustained supply network and considerable funds were required.[84] This network and wealth must have been available in the Tarim by the fourth to fifth centuries, if not before, when sustained stupa and cave construction starts.[85]

This prior condition of network and surplus could be repeated for most of the other commodities necessary for the decoration and worship at the shrines and cave temples, from the gold and silks used to adorn the many stupas, the seven treasures for the relic chambers and as votive offerings, to the ingredients for the incense used in the frequent public and private ceremonies.

CONCLUSION

From the material evidence three factors can be identified concerning Buddhism in the Tarim and which require explanation.

1. Regular and sustained interregional movement of Buddhists and others transmitting artistic and architectural styles;
2. Regular and sustained interregional movement of goods used for building, decoration, and worship at stupas and temples; and
3. Local surplus wealth to enable the building, decoration, and maintenance of stupas and temples.



10.9. Detail of a wall painting from the Buddhist caves at Kizil showing use of lapis. Staatliche Museen zu Berlin, Museum für Asiatische Kunst, III 8420.

Borrowing the principle of Occam's razor, trade is the most parsimonious explanation to account for all of these. If trade is rejected as the primary explanation, then compelling evidence is needed for its lack and for alternatives and not just an absence of supportive textual evidence. I would argue that our scholarly energies would be best concentrated on interrogating the considerable data – textual and archaeological – to test the hypothesis of sustained interregional trade networks around Central Asia and beyond in more detail and not to let Chinese historiography or a too literal understanding of the Silk Road concept divert us.

NOTES

1 Chin 2013, who discusses the plan for a Europe–China railway link. Also see Waugh 2007. As he points out, Richtofen was also interested in other routes, including by sea.

2 The term "Silk Road(s)" was not immediately adopted, as both Waugh and Chin point out (Chin 2013; Waugh 2007). A brief overview of its increasing usage, starting in Japan, China, and Korea and then moving to European adoption, is given in Whitfield (2007). This piece also argues that it has some usefulness as a concept in the current nascent stage of scholarship. Warwick Ball dismisses the concept as a "meaningless neologism" (Ball 1998). Also see Whitfield (2015: Introduction).

3 Whereas Richtofen had argued that there was Chinese involvement in the Han period (206 BC–AD 220).

4 "[T]he sites of Central Asia had for centuries relied for their prosperity on irrigation agriculture … This alone easily explains the wealth and prosperity of this region without assuming an economy based on trade" (Raschke 1978: 640–641).

5 Summarizing the conclusions of Jones (1974: 30) and Finley (1973).

6 "[N]ot much of a commercial route … trade existed but it was limited … Markets existed in these different towns, but they offered far more local goods for sale then exotic imports" (Hansen 2012: 235–237). However, it is recognized that this is not in itself an argument against sustained prestige trade. Volume is not directly related to value, and by necessity goods from afar would have cost more. Luxury goods have a smaller market, but a higher value one. See following text.

7 "The massive transfer of wealth from Central China to the northwest, where many soldiers were stationed, accounted for the flourishing Silk Road trade when the Tang dynasty was at its strongest, before 755 … these underpinned the region's prosperity" (Hansen 2012: 237). By the eighth century the payments were enormous: 1.8 million bolts of silk to Hexi military command (Arakawa 2013: 250–251). This must certainly have been a factor in the region's prosperity although much of the following discussion involves the pre-Tang period as well when relations with the Tarim were not so stable. Raschke also argues that there were large quantities of silk in the Tarim owing to Chinese government policy, in the distribution of which "plunder and tribute played the primary role" rather than trade (Raschke 1978: 619).

8 Including trade in human goods as well – slaves appear in many of the extant documents. See the Sogdian contract for a female slave discussed by Frantz Grenet "La Commerce des femmes sur la route de la soie." In Whitfield 2009: 34–35. See also Whitfield 2018: ch. 10.

9 Hugh Pope (2005) called it "a romantic deception." See also Rezakhani 2010.

10 There is an extensive study of the Bronze Age and Early Iron Age by Han Jianye (2007 韩建业 《新疆的青铜时代和早期铁器时代文化》, 文物出版社, DSHKX 1986/4, 78–82); Wang Binghua 王炳华: 'Xinjiang chutu caitao' 新疆出土彩陶.; Mu Shunying 穆舜英 and Qi Xiaoshan 祁小山: Xinjiang caitao 新疆彩陶. Beijing: Wenwuchubanshe 1998. 郭物 新疆史前晚期社会的考古学研究 Tomber also makes use of evidence from coins, as

does Helen Wang's excellent study and comprehensive catalogue (Wang 2004) and a more recent collection of articles (Hansen and Wang 2013). Wang focuses on the use of coins and other money in the Tarim rather than what the distribution of coins can tell about the movement of peoples and her catalogue remains to be fully exploited in an approach such as Tomber's.

11 Among his arguments is that the glasswares found are too poor quality to justify their trade over a long distance. However, this is to assume parity of value across cultures. The trade of Chinese porcelain that would have been considered second rate in China but was highly prized in Europe shows the dangers in this. Certain glasswares found in Northwest China are now accepted as Mediterranean (see here and below Whitfield 2009: 80–83). There is also evidence of glass being sent by sea, as in the Hellenistic bowl found in a ca. first-century BC tomb near Guangdong in Southern China (Whitfield 2009: 81, where it is mistakenly listed as Roman. See also Whitfield 2018: ch. 2). There is also evidence, as Raschke suggests, of local and regional production, such as Sasanian glass. As ever, the picture is complex.

12 It might be worth considering the Tarim at different periods in terms of Oka's TSM theory, as discussed in this volume.

13 Beaujard 2010: "I speak of spheres of interaction when exchanges within an area do not produce a significant transregional division of labor (unlike a world-system)" (9 n.21) and see his chapter in this volume.

14 Rhie 2007–2010 for an overview and bibliographies of the early explorers. New finds continue to be made. See, e.g., the temples at Domoko (Wu 2013).

15 Undoubtedly, there were chronological and regional variations and developments through the Tarim regarding interaction in the first millennium, and one of the arguments of this chapter is that studies of these need to be made before there can be any firm conclusions.

16 See Hartmann 2004, McRae and Nattier 2012, and Neelis 1997, for important discussions on interregional interactions concentrating on inscriptions and manuscripts.

17 Scholarship in this area is in its infancy: None of the kingdoms, e.g., is the subject of an historical monograph (Teramoto's early work [1921] (in Japanese), Zhang and Rong's collections of essays [1993] and Li Yuping's historical annals [2006], both in Chinese, follow Rémusat 1820 in being more a compilation of historical sources). For an overview of most of these kingdoms, their archaeology and history, see Whitfield and Sims-Williams 2004 and Hansen 2012.

18 Stein suggests the robberies took place by the sixteenth century based on the sixteenth-century records of Muzā Haider (Stein 1907: 82). He also notes the remains of birds' nests in one of the robbers' tunnels into a Krorainic stupa strongly suggesting the robbery was affected when there were still birds in the area, certainly pre-sixteenth century (Stein 1921: 390).

19 These are estimates based on archaeological reports. I am including cave temples as far east as Dunhuang, but not others further east in the Hexi corridor.

20 Rhie (2007–2010: Vol. 1: 254).

21 An argument explored by Buffler 2009. The possible influence of Zoroastrian fire temples in the development of the tower stupa has also been suggested. See Franz 1980: 46 for a discussion.

22 For a recent set of papers concerning the mechanics of interaction for both the portable and the monumental in the late medieval world see Grossman and Walker (2012).

23 Grossman discusses memory in the context of buildings of the Crusader Mediterranean. She refers to the work of Carruthers on the nature of memory in the European medieval world (Carruthers 1998; Grossman 2012). Chen has discussed the building of stupas as an act of "continuity with the past" and looked at communal memory and cultural memory in Buddhist historiography and in the construction of ordination platforms (Chen 2007).

24 In a different context, Redford considers how portable models of architecture, e.g. ceramics, "established an intercultural receptivity to large scale architectural forms and the reproduction of these architectural models in new locales" (Redford 2012 and quotation from

Grossman and Walker 2012: 9). Stupa models in clay and wood were found in considerable numbers in the Tarim stupas, seemingly as votive offerings as found elsewhere but they might also have a prior role (for some examples see Stein 1921: 158, 161, 931, 1105, etc.).

25 Olivieri sees them as "more sculptures than buildings" but argues that their size leads to complexity (2014: 337).

26 For a brief discussion of this and review of previous studies see Olivieri 2014: 337–339.

27 While Rhie discusses the buildings from a stylistic and art historical point of view she does not cover building practices, transmissions, or economics.

28 Apart from graves, the remains of tamped earth and brick city walls are the main remains found to date.

29 They could have made use of local builders and laborers, including conscripts from local populations.

30 There is seemingly little standardization of brick size across the extant structures. Stein noted the brick sizes of all the structures he excavated, including the stupas, and made a general hypothesis about the larger bricks denoting earlier buildings.

31 Shimada discusses the role of nuns and monks in supervising building works in India (2013: 158–159).

32 There is evidence of an influx of settlers in the third century from Gandhāra bringing their language and script with them and settling in Kroraina, site of some of the earliest stupas (Zürcher 2012). The manuscripts in Gāndhārī written in Script often include Indian names, notably those on a length of silk found on a stupa in Miran, seemingly as an offering (Stein 1921: 495 – where he also identifies Iranian names on this piece).

33 Probably in Skardu (Legge 1965: 17–18).

34 Some manuscripts from the Tarim, Dunhuang, and China concern the accounts for building caves and monasteries and mention the different workmen involved such as, e.g., in AD 775 in China: earth movers, masons, carpenters, squarers, roofers, door and window makers, plasterers, brickmakers, and temporary laborers (Gernet 1995: 18–19). See also his discussion on construction and its effects on the community (17).

35 Mentioned by Kieschnick (2003: 161). Although, as Kieschnick also points out, judging by the inscriptions on extant objects in China, the majority of donors were laypeople (162). See also Schopen 2006 and Shimada 2013, who discusses the range of donors to stupas, and described them as "The Architecture of Collective Patronage" (163).

36 Liu 1997: 120 quoting from Songyun's travels. See below n. 63.

37 And, in some cases, another time – a link with the past, as discussed by Chen 2007. Kieschnick discusses the role of Buddhists in bridge building (2003: 203ff).

38 *Jinshu* (History of the Jin).

39 Holcombe 1999: 288, citing *Fozu tongji*.

40 For references see above n. 16.

41 Zürcher, e.g., claims that the Tarim prior to the third century BC was a Buddhist wasteland, but does not dispute the influence of Buddhism after this date. He sees a major catalyst being the influx of a Gāndhārī-speaking population at this time – evidenced by the use of Gāndhārī written in Kharohī for the administrative documents discovered in Kroraina (Zürcher 2012). Walter, in contrast, sees Buddhism as taking hold in Kucha from the first century AD and being one of the primary factors in the conversion of China from the third century (Walter 1998).

42 Lam 2013. He points out that one reason for the success of Buddhism was its lack of interference in political affairs, which "promoted a non-threatening image of Buddhism in the eyes of the military and political elite" (441).

43 And into China – e.g., the family of the Kushan lay Buddhist Zhi Qian (fl. 222–c. 253) is reported to have moved to China two generations before he became influential at the court of the Three Kingdoms Wu (Holcombe 1999: 286). The issuing of coins in Kroraina with legends in the language and script used in Gandhāra supports the importance of the links (Cribb 1984).

44 Warder suggest that it was adherents of the Darmaguptaka sect that led this, as cited by Mukherjee (1996: 14–15.) He argues that Gāndhārī was the language of the transmission, also used in Kroraina in the southern Tarim and written in script. However, most of the documents discovered to date are administrative archives and not Buddhist.

45 The movement was increasingly multidirectional, so monks from China, e.g., traveled through the Tarim en route to India, bringing back with them not only texts and objects, but also memories of Buddhist structures. Most famously, as mentioned previously, the seventh-century Chinese monk, Xuanzang, on his return to China asked the emperor to build a stupa in the capital in the style of that of King Kaniskha (Wong 2012).

46 For discussions on early Buddhist monasticism in India, see Schopen 2004, especially chapter 2, where he discusses some of the ambiguities of this relationship, and Shimada 2013: 149–155 where he discusses the development of this idea of patronage. See also Shaw 2011 and Gernet 1995 for practices in the Tarim and China.

47 Shimada, however, questions the role of rulers in patronage in early Buddhism (2013: 160–163). See also Lam 2013 for a discussion of the role of the Kushan kings.

48 It has been argued that, after the Kushan, there was another fluorescence of Buddhism in Central Asia under the Hephathlite rule. The Hephthalites were not Buddhist but, it is argued, the unification and stability they brought to the region enabled a new spread of Buddhism, when it reached as far as Merv in Margiana. (Grenet 2002).

49 Rhys-Davids 1890–1894: 274. Cited by Neelis in "Buddhism and Trade," https://depts.washington.edu/silkroad/exhibit/religion/buddhism/buddhism.html (accessed 16 November 2017), also see Neelis 2013.

50 Ray notes that Buddhist institutions were "ideally suited to act as pioneers in newly settled area but also to provide and identity for and cohesiveness for trading groups" (1994: 5)

51 Led by Professor Lewis Lancaster working with the Archaeological Survey of India. See http://youtu.be/liE_AHvFivM (accessed 16 November 2017).

52 See Schopen 2004: 29–30, quoting a saying of the Buddha on how to make a loan and how to write a written loan contract. Also see Gernet 1995: 153ff.

53 Shimada gives other examples of such endowments (2013: 156).

54 Liu 1997: 120 quoting from Songyun's travels. Of course, such stories might not accurately reflect local conditions but might be popular stories adapted from India and applied in a Central Asian setting.

55 Qualifying the scale of trade is very difficult. Hansen argues that "the actual volume of trade was small," using as an example a document mentioned that a merchant had two camels, four cattle, and a donkey. However, a camel load of wool is very different in value from a camel load of musk. Volume is only part of the story and one always relatively restricted by land travel.

56 Sherratt 2006: 38; Mallory and Mair 2008: 4. Legends in later Tibetan and Chinese sources tell that Khotan was founded during the reign of King Aśoka (ca. 272–231 BC) in India. The earliest dated artefacts are coins from the first century AD with legends in both and Chinese (see Cribb 1984; Wang 2004). Awaiting a systematic study on this, but it is found in different cultures in a preunited Central Asia, e.g., in use of burial suits in southern kingdoms in China (Lin 2012).

57 Although there were links with neighbors across the Tianshan to the steppe, as evidenced by burial goods, the extent of these and the involved of trade has yet to be fully explored.

58 See especially La Vaissière 2005.

59 La Vaissière 2005: 180–181. He also considers Persian and Jewish merchants – the former is also mentioned as traveling with the Sogdians although he suggests that the Persians mainly controlled the routes west, the common boundary being Merv (just as there might have been a boundary of interest with Indian traders at Shaital). The evidence for Buddhism at Merv has been placed variously from the second century to the fifth century, although latter is now generally accepted (Callieri 1996 and La Vaissière 2005: 78). Parthians and others are mentioned as traders by the Chinese: "Some of the inhabitants are merchants who travel

by carts or boats to neighbouring countries, sometimes journeying several thousand li. The coins of the country are made of silver and bear the face of the king" (*Shiji* 123: 3162, trans. Watson 1958: 234).

60 Walter (2006) and Compareti (2008) argue for Buddhism in Sogdia from the Kushan period. De la Vaissière argues there is no evidence until the seventh century and that the Buddhist Sogdians mentioned in the Chinese records were from families who had moved to India and elsewhere (La Vaissière 2005: 77–79).

61 E.g., La Vaissière (2005: 180) quotes a Chinese document naming a Tocharian called "Fuyan" which he tentatively translates as "favor of Buddha."

62 "… in precisely those regions where great commerce and diffusion of Buddhism overlapped" (La Vaissière 2005: 77).

63 Their role was briefly discussed by Zürcher 1972: 23–24 who mentioned their language skills, a point picked up by La Vaissière in relation to the Sogdian émigrés: "These monks learned the Indian languages in the emigration, and this enabled them to translate the Buddhist texts into Chinese" (2005: 78). The Sogdians are listed by Walter (2006: 64–66).

64 Zürcher 1972: 1, 23. An Xuan was probably a Parthian.

65 Of course, monks might also have traveled with diplomatic missions, although these were also often linked to trade and included merchants.

66 E.g., Dharmagupta who reached Changan in 590 had lived for two years in Shule (Kashgar) and then spent seven years to reach Chang'an, so must have also spent considerable periods in residence at one of more of the other Tarim kingdoms. He traveled along the northern Taklamakan, through Kucha, Karashar, Turfan, and Hami. Dharmagupta is recorded in Chinese sources because he reached China, but there were potentially many more monks who decided to settle in the Tarim and whose names do not appear in any extant sources.

67 Lam questions the role of the Seven Treasures (2013: 443).

68 Liu focuses on China and India and does not specially address the Tarim region.

69 Raschke suggests that monks might have brought these with them. Evidence for patronage and the import of items from elsewhere is found at other sites, such as Dunhuang and Famen Temple. It is also plausible that smaller stupas contained lower value items, such as parts of manuscript sutras.

70 See Stein 1921: 493ff. for a discussion of the murals at Miran. Many new murals are being discovered in temples, such as at Dandan-Uliq (Zhang, Tao, and Liu 2008) and Domoko.

71 The interest in cave temples here is primarily concerned with the logistics of their decoration rather than their architectural or artistic influences. I have covered the former elsewhere (Whitfield 2019) and will not repeat my findings here. There are numerous studies approaching the cave paintings from an art historical viewpoint, as well as a growing body of excellent conservation studies.

72 The remains of cave 85 at Dunhuang, classified as a large cave, comprise about 350 m^2 of wall paintings, although the cave is missing part of its antechamber (Wong and Agnew 2013: 85). When complete, this is comparable to the Sistine Chapel ceiling, at about 500 m^2.

73 For a discussion of murals across a wider Silk Road area, including West Asia, see Yamauchi, Tanigushi, and Tomoko 2007.

74 This includes a discussion on the issues of identifying organic colorants. See also Appendix 13.A in this volume ("Literary Evidence of the Use of Organic Colorants in Chinese Painting during the Tang Dynasty at Mogao" [381]).

75 Recently some work has been done on isotopic analysis of the lead-based pigments showing the potential for further work in this area to identify the sources, but this is still in its early stages (Brill et al. 1997). Hence the concentration here on one pigment whose primary source is incontrovertible.

76 The source of lapis lazuli is fairly noncontroversial, although there were other sources and similar minerals, notably soldalite, but Badakhstan was the main source (Good 2008: 28–34). Hill 2009: 611–612 provides a summary and other references to early trade. As pointed out in these, isotopic analysis should be able to provide more precise details on origins of the

minerals. See Schafer 1985: 230–234 for its use in Tang period (618–907) China. It is used for the eyebrows in the mask of Tutankhamun and early examples have also been found in Syria and elsewhere. Possible examples of pre–Silk Road use in China have been found but are disputed (Berke et al. 2010: 229–230).

77 "[T]he extravagant use of a brilliant blue – the well-known ultramarine which, in the time of Benvenuto Cellini, was frequently employed by the Italian painters, and was bought at double its weight in gold": von le Coq 1926.

78 Schafer 1985: 230–234.

79 And in China, where it is known in painting manuals as "Buddhist blue" (see n. 104).

80 Liu et al. 2013.

81 See Li 2010: 49–51 showing the use of lapis in these caves at least through to the tenth century.

82 The pigments were probably ground locally, although Wiedemann and Bayer suggest that Han blue was available in octagonal pigment sticks (1997: 379). As with architecture in the Tarim, there is little work on the logistics of cave paintings, most referring to Chinese practices. Sarah Fraser's (2004) study covers the practice of artists in the design and execution of wall paintings at Dunhuang, but not the supply and funding of the raw materials required. But this must have been a question of concern to rich patrons who wanted to see the work completed. See Schafer 1985 for a discussion of supply. The nineteenth-century painting manual by Yu Feian is a useful source as it refers to earlier sources and has chapters on the preparation of pigments with interesting insights into the labor involved. E.g., 'Xiang you has said, "Making two hundred grams of cinnabar requires one day of manual labour," but I feel that it requires two days" (Yu 1989: 56). Lapis is listed as "Granulated blue," but he goes on to say: "Also called Buddha blue … This is a pigment that came to China from the Western Regions." He says it comes in packages of 2,400 g (8). His chapters on pigment preparation do not discuss lapis. The lack of early Chinese sources on the preparation and use of lapis reinforce the hypothesis that these skills came into the Tarim from India/Central Asia, probably brought with monks and artists.

83 Because of the lack of work in this area it is difficult to produce any firm figures. Estimates vary as to the amount of blue pigment obtainable from the mineral but are in the region of 30–50 g per 500 g to 1 kg.

84 Just as the case with architecture, those with a knowledge of Buddhist iconography, stories, and paintings were also required. Walter (1998: 26–27) shows something of this in her example of caves at Kizil supported by the king and involving an Indian and Syrian artist and their disciples as painters. In another case, the Khotanese king sent artists to Kizil to help with the caves, suggesting a link between the kings of these neighboring kingdoms.

85 Before the period when Hansen notes that the region was flooded with Chinese silk. There remains both Raschke and Hansen's argument that the wealth of the Kizil rulers, e.g., came from irrigation agriculture. This chapter does not seek to argue that Chinese silk and agriculture were not factors in the wealth at various places and various times, but rather that these do not preclude trade as another factor.

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ELEVEN

TRADE, TRADERS, AND TRADING SYSTEMS: MACROMODELING OF TRADE, COMMERCE, AND CIVILIZATION IN THE INDIAN OCEAN

Rahul Oka

INTRODUCTION

The central theme underlying this volume according to the editors (see Kristiansen, Lindkvist, and Myrdal, this volume) is that "[o]ne of the most enduring analytical structures of societies is the one between trade and civilization." However, this premise comes with a caveat that "the form and content of trade has differed" under varying economic, political, and logistical conditions and that, while manifesting in both prehistory and history, "global trade networks were not durable, and it is important to discuss the establishment and break down of great trade network systems." The role of trade as structuring contemporary and most societies post-1500 AD is not a matter of any debate. The European search for trade routes to Asia is widely seen to have transformed the world (Abu-Lughod 1991; McNeill 1999, but see O'Rourke and Williamson 2002). There is also an emerging consensus about the presence and significance of trade in most past "complex" societies or, as Ben Bronson suggested, "civilizations" (Oka and Kusimba 2008). The task before historians, archaeologists, and cliometricians is thence to discuss the ways in which trade and trading behaviors manifested within and shaped past societies, and how these might serve to explain the central role that trade does play in the contemporary world.

This chapter serves to unpack some of the causes, complexities, and consequences of trade and its relationships with polities, states, and empires

through the Trading Systems Model (TSM). This is a qualitative model (from an engineering standpoint) that shows the expansion, contraction, and evolution of trading behaviors and institutions responding to changes in their sociopolitical and regulatory environments. Specifically, this modeling approach addresses some of the key questions raised by the volume editors (Kristiansen, Lindquist, and Myrdal), namely: How do traders and trading institutions negotiate their autonomy in relation to local elites, and relate to political power across and between urban cores? Is trade a prerequisite for the making of stable political structures or vice versa? And last, but most important, what is the relation between trade and predatory economies and other trade-unfriendly conditions including war, and other anthropogenic and natural disasters?

The Indian Ocean is an ideal forum to address these questions. Responding to a continuous demand across regional and continental scales for at least 5,000 years, Indian Ocean trading groups negotiated various types of social and political economies, including global empires, administered states, and commerce-friendly and predatory polities. For much of the past three millennia, the Indian Ocean has been the source of spices, ivory, frankincense, myrrh, silks, sandalwood, and other exotica, as well grains, cattle, metal ores and goods, and other bulk/staple commodities highly demanded by consumers across the Old World (Das Gupta and Pearson 1987; Pearson 2003).

Paralleling the historically observed cycles of political centralization and decentralization of polities, and in line with ethnographic observations of trader network transformation, since the Bronze Age until the eighteenth century AD, the trade and commerce that transpired even at a global level depended upon the adaptive resilience of hundreds and even thousands of overlapping regional trade networks maintained by trading specialists who negotiated with local elites, producers, and consumers. The overlap of these networks enabled goods, services, and peoples to travel across Afro-Eurasia without the constant presence of a direct global interaction of actors and relationships (Pearson 2003). However, at certain times, political and regulatory conditions facilitated the rise of such actors who generated direct transregional/oceanic trade and commercial networks that integrated the regional trade networks (Bang 2007, this volume; Oka 2008). These include the periods from 1200–800 BCE, 500 BCE–400 AD, 800–1300 AD, and post-1600 AD (see Beaujard, this volume). However, despite these periodic global interactions, real trade globalization did not emerge until the late seventeenth and eighteenth centuries (cf. O'Rourke and Williamson 2002; Pomeranz 2009).

In the following section, the behavioral mechanisms underlying the TSM are outlined (Oka 2008; Oka et al. 2009a). Specifically, this approach is built on the ethnographically observed premise that changes in political and regulatory environments affect traders' attempts to establish, sustain, or modify their trading activities (Oka 2008; Oka and Kusimba 2008). To conduct business,

traders use convergent sets of strategies or heuristics or "trading systems" that are dependent upon the prevailing political and regulatory environments. They respond to changes in these environments by shifting from one trading system to another, the cumulative effect of which is a structural change in local, regional, and global trader networks, when the network shifts from a (more) distributed to a (more) hierarchical network or vice versa. These structural transformations, in turn, affect the larger social and political economies that are serviced and integrated by these trader networks. This network transformation enables trader network resilience at both local and regional levels and the ability for regional and diasporan traders to scale up to or down from global networks depending upon the political and regulatory environments. This model is then applied to the trading encounters in the Indian Ocean that have spanned Africa, Europe, and Asia, with an archaeological case study on the decline of the port city of Mtwapa, Kenya, 1500–1700 AD.

THE TRADING SYSTEMS MODEL

The idea that trade transformed/transforms the world in which it operates, as a result of traders responding to social demands, was first developed within Western economic thought by Adam Smith, who wrote in *A Theory of Moral Sentiments*,

> [The pursuit of] wealth and greatness … [and "baubles and trinkets"] … [is that] deception which rouses and keeps in continual motion the industry of mankind. (2004: 241).

Smith further argued that although:

> The pleasures of wealth and greatness [manifest within] abstract and philosophical light [was] contemptible and deceptive, … we naturally confound [the satisfaction from these pleasures] in our imagination with the order, the regular and harmonious movement of the system, the machine or economy by means of which it is produced, [and think of these as] grand and beautiful and noble.

Smith was referring to the contradictory nature of trading pursuits that brought great wealth and financed significant achievements in civilizations but also injected great inequity into the world. His concern, as that of his contemporaries, within the Scottish Enlightenment, was not whether trade was important for civilization, but to understand the organization of political economies. He argued that while truly open and fair market economies led to the greatest advancement for civilization, those controlled by few predatory players and/or states posed severe social, economic, and technological restrictions and limitations (Smith 1976). Contrary to popular opinion, Smith was not an advocate of unchecked/unregulated economy, as he recognized

and observed that in absence of oversight, commerce interests would subsume the polity. In "The Wealth of Nations" he said of powerful merchants in late-eighteenth-century Britain:

> [Traders], … by a strange absurdity, regard the character of the sovereign as but an appendix to that of the trader, as something which ought to be made subservient to it. (Smith 1976 [1776]: 637)

He further cautioned that founding:

> A great empire [was] a project altogether unfit for a nation of shopkeepers, but extremely fit for a nation that is governed by shopkeepers. (Smith 1976 [1776]: 114)

For Smith and the Scottish Enlightenment thinkers, as well as later utilitarian philosophers such as John Stuart Mill, the moral hazards posed by unregulated merchant cartels or cronyism between merchants and politicians were just as harmful as predatory politicians who sought to curtail and constrain trade through overregulation and taxation (Dow 2010). The emerging intellectual foundations of the late eighteenth and nineteenth centuries were a counterdiscourse to an ever-present mercantilism and a nexus among and between powerful merchants and political elites perceived to undermine the efficiency of past economies (Oka and Kuijt 2014).

Pertinent to this chapter is the observation of the Scottish Enlightenment thinkers of a dynamic between traders and political elites and the caution against the extremes of closeness and enmity between these groups (Folbre 2009). This dynamic opposition/nexus relationship is strongly dependent upon the stability of the political environment and on the regulatory conditions placed on trade and traders by the political elites (Oka 2008). The scale and organization of trading ability is a direct function of the stability of the political systems and the presence, scope, and enforceability of rules and regulation under which it operates, ranging from highly unstable and unregulated to stable and predatorily regulated political conditions and other combinations of these variables (Oka 2006; also see Bremmer 2006 for a similar conclusion).

My own ethnographic research suggests that these dynamic tensions between traders and politicians, and between trade, political stability, and regulation, remain as true today (see Oka and Kusimba 2008) as they did when: John Locke, Adam Smith, and John Stuart Mill were writing in the seventeenth to eighteenth centuries AD (Oka and Kuijt 2014), and when St. Augustine, Paul, Pliny, Aristotle, Plato, Pericles and Xenophon (Greece/Rome), Kautilya and Manu (South Asia), Han Feizi, Confucius, and Lord Shang (China) were complaining about the negative social impacts of unregulated trade in the late first millennium BCE (Oka 2008: 104–107). The Legalist scholar Lord Shang Yang wrote in sixth-century BCE China:

> Trade should be hampered as much as possible by heavy tolls, traders should be made to serve and to live simply, heavy prices and taxes should be fixed for such luxuries as wine and meat and trade in grain should not be allowed. (Duyvendak 1928: 49)

Foreshadowing Adam Smith's concerns by eighteen centuries, Lord Shang also placed his distrust of trade within a narrative of inequities developing from predatory commerce:

> Those [peasants] who have grain sell at half value while those who have not borrow at exorbitant usury. Then paternal acres change hands; sons and grandsons are sold to pay debts, traders make profits and even petty tradesmen set up businesses and realize unheard of gains. Every day, they loiter on the market places of the capital, and, taking advantage of the oppression of the superiors, have double profit on what they sell. (Duyvendak 1928: 55)

On their part, traders were developing narratives on their particular importance, worth, and contributions to society, as summed up in this eleventh-century AD inscription on a temple in Sumatra by the powerful South India merchant guild, the Five Hundred Lords of the Ayyavole, who operated across South India and Southeast Asia, both in partnership and tension with the Chola state:

> Famed throughout the world, adorned with many good qualities, truth, purity, good conduct, policy, condescension and prudence; protectors of the *Vira-Banaju-Dharmma* [law of the heroic traders], … [traders] fill up the emperor's treasury of gold, his treasury of jewels, and his armory of weapons, and from the rest they daily bestow gifts on *pandits* and *munis* [scholars and sages]. (Kulke and Rothermund 1998: 119–120)

Such flamboyant statements, characteristic of the Ayyavole guild, nevertheless formed part of a larger trader folkloric narrative where clever traders outwitted greedy elites and were the real forces of good in society (Abraham 1988). These narratives have been documented among Asian and European business groups since around 500 BCE to the present (Altpeter-Jones 2011; Ho 2006; Upadhyaya 1966; Wheatley 1975).

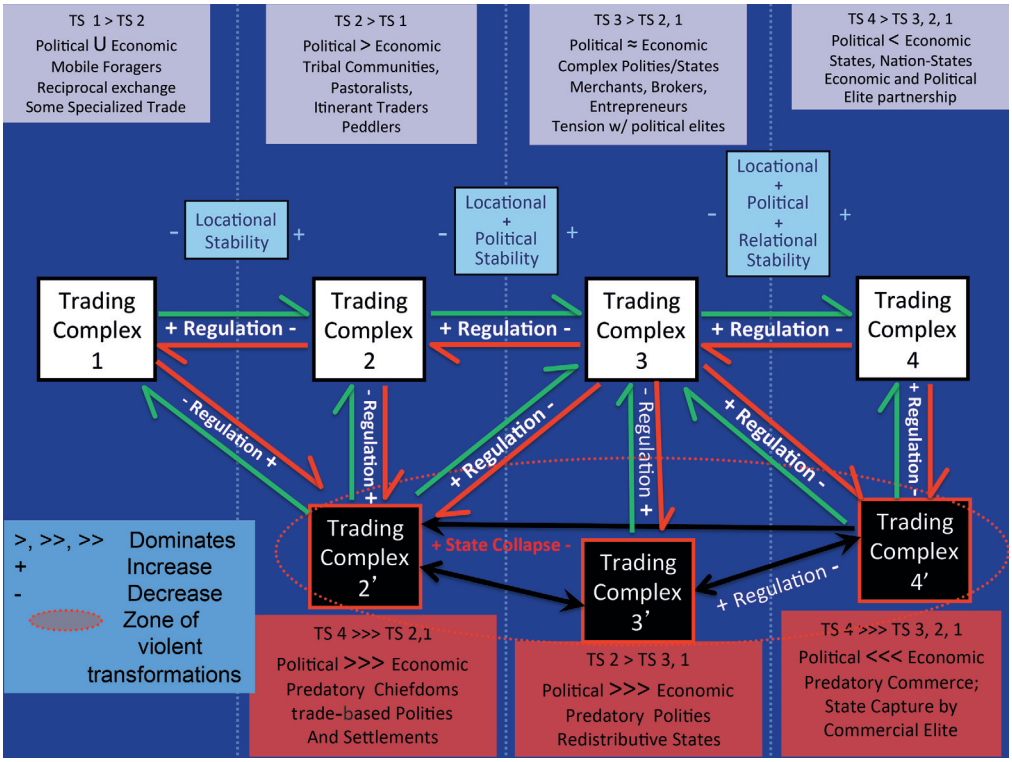
Based on ethnographic, oral historical, and archaeological research, I have developed the TSM to explain how the dynamic trader-politician interaction and the relationship between trade, political stability, and regulations are the key underlying mechanisms for understanding how trade and civilization affect and shape each other (Oka 2008; Oka and Kusimba 2008; Oka et al. 2009a). The TSM is a qualitative phase transition model in which traders shift from one trading system (TS_n) to another ($TS_{n\pm1}$) in response to changes in stability and regulations. As the emerging trading system affects the amount of decisions, goods, services, and information that flow within the trader networks, political elites will seek to encourage, control, or discourage these

activities depending on their own attitude toward trade and commercial activities. The resulting tension will manifest in further changes ($TS_{n\pm1}$) or entrench the now dominant TS_n. This process is explained in greater detail elsewhere (see Oka 2008; Oka and Kusimba 2008; Oka et al. 2009a, 2009b), but, simply put, four Trading Systems (TSs) are identified that merchants have historically employed to manage their business affairs.

- TS 1 is largely a gift/service/favor exchange system built on culturally specific but also universally seen rules of reciprocity that structure human interactions and are the main primary basis for building and maintaining trade relationships and partnerships (Mauss 1990; Weiner 1992).
- TS 2 is the set of strategies used by mobile traders (peddlers, tinkers, pastoralists, gypsies) who operate in small quantities of commodities on the high-risk/high-profit margin model and who form relationships of reciprocity with elites and consumers within settled societies. As a high-risk strategy, it also characterizes one of the dominant TS used to trade within and between predatory polities and states (Gmelch 1986).
- TS 3 dominates the activities of ethnic traders or trading families (merchants and brokers) who deal in larger volumes and invest time, effort, and resources to maintain and expand relational networks to keep goods and capital moving within their communities that stretch across polities and states (Cohen 1971; Curtin 1984). Traders using TS 3 focus on maintaining adaptive resilience of their networks, controlling or limiting the rate of growth of economy, practicing self-restraint and low visibility of trading and business activities.
- TS 4 is the strategy set used by established trading groups (entrepreneurs, large merchants, and portfolio capitalists) in conditions of growing trade stability and friendliness. These strategies favor profit and growth maximization and eschew the self-limitation and limited growth favored by the network-centered strategies seen in TS 3. Other strategies in TS 4 involve large volumes of commodities and capital; close nexus with and sponsorship of political elites; and heavy influence in economic and fiscal policies (Bang 2007, this volume; Subrahmanyam 2001a, 2001b).

The emergent dynamic stable state when one TS dominates the trading behaviors is called a Trading Complex (TC), namely TC_n (N = 1, 2, 3, 4). TCs exist in two types, TC_n and TC'_n. Here, TC' refers to the conditions of overtly *predatory* and often violent relationships between traders, political elites, and/or society, while TC indicates neutral to friendly relationships between these groups. The relation between the four identified TS and TC, and three TC' are explained in the model in Figure 11.1.

As seen, the model shows the various combinations in which certain TS dominate or shift in response to changing conditions of stability and regulation and lead to particular types of TC/TC'.



11.1. Phase transition model of changes in trading systems and complexes.

While the shifts from $TC_n \rightarrow TC_{n\pm1}$ are clearly outlined in the model, it is important to briefly discuss the term *predatory*. As applied to polities, states, and commerce, predatory is a condition in which vested political and/or economic actors or groups seek to control or regulate trade and commercial activities and exclude any competitors (Oka and Fuentes 2010). This type of behavior is attritional for exchange systems in the long run, whether the trade is conducted by individuals or groups for profit or gain, for example, tribal trading villages, warlords, chiefdoms (Bandy 2004; Kipp and Schortmann 1989; Northrup 1972), or when driven underground by antitrade/commerce ideology, for example, China, Rome, Athens, Egypt, and the Inka (see Earle, this volume; Oka 2008: 104–107; Wenke 1997; Zhang 2007).

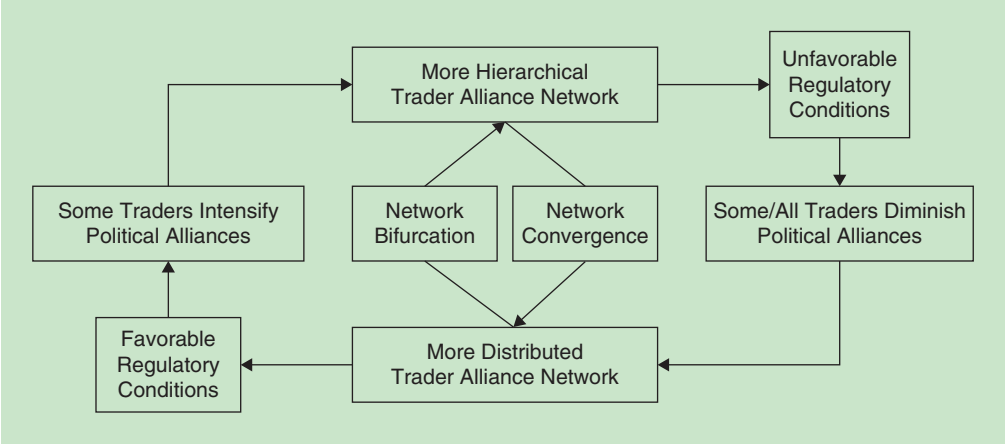
Predatory polities and states establish punitive systems of regulation or control through stringent rules, bureaucratic hurdles, and excessive taxation where the traders gain fewer returns from their formal engagements with the political elites than the transaction costs. These unfavorable conditions might result in the absence of trade/traders in the historical or archaeological record (see Earle, this volume). However, as studies on states thought of as highly controlled, administered, and/or predatory (e.g., Dahomey, Imperial China, Egypt, Rome) suggest, this might also indicate an informal economy that co-opts and

subsumes the managers and bureaucrats within the state's production and redistribution (Bronson 1990; Law 1992; Oka et al. 2009b; Osborn 1996; Warburton 1998; Wenke 1997. Such an economy would be highly successful at hiding its presence for its own survival and therefore would leave little trace in the material culture or in the state archives (Lomnitz 1988; Oka 2011; Oka et al. 2009b). In other words, an informal economy might have the same archaeological signature as no economy. The question here is whether it can be assumed that, in the absence of archaeological evidence of trade, trade was not important. This problem is especially pertinent when historical and ethnographic evidence suggest that attempts to control or regulate trade usually lead to the emergence and reinforcement of informal economies that, though covert, might constitute between 10 and 90 percent of the total economic system, and co-opt and parasitize on formal economies (Hann and Hart 2009; Lomnitz 1988).

Predatory commerce, by contrast, indicates the conditions in which individuals or groups of traders and merchants directly control or strongly influence state economic and fiscal affairs and exclude competitors from access to markets and economic opportunities (Oka 2008, 2014; Oka et al. 2009a). This includes activities such as the dumping of goods in markets for the purpose of market capture, co-opting elites to disinvest in local production economies, competitive import substitution and/or imitation, extractive economies, usury and other high-interest punitive lending/banking services, kleptocracy, and state capture (Hellman, Jones, and Kaufmann 2003; Li 2008). Predatory commerce involves the moral hazard of growing mutualism between political and economic elites, and the protection of traders and merchants from the costs of failure or negative repercussions of their activities, thus incentivizing high-risk behaviors and decisions (Haslag and Pecchenino 2005; Hellman et al. 2003). Like predatory polities and states, predatory commercial systems also result in high inequality and a lowered rate of social well-being and might also trigger socioeconomic collapse (Oka et al. 2009a; Tett 2009).

Returning to the TCM, the underlying mechanism of these phase transitions ($TC_n/TC'_n \rightarrow TC_{n\pm1}/TC'_{n\pm1}$) are traders' responses ($TS_n \rightarrow TS_{n\pm1}$) to their own local and regional conditions of stability and regulation and the resulting trader alliance network transformations. The transformed network, in turn, affects the production, distribution, and consumption of goods as traders respond both to external demands and regulatory conditions by altering their commercial activities. The primary mechanism identified in each of the transitions in the TCM is a structural shift between cooperative alliances and competitive relationships within the trading groups leading to either (more) distributed/decentralized or (more) hierarchical/centralized networks in the larger Trader Alliance Network, as shown in Figure 11.2.

This shift is modeled on the results of historical/ethnographic research on traders and merchants in Asia, Africa, and the Americas (n = 412). Key

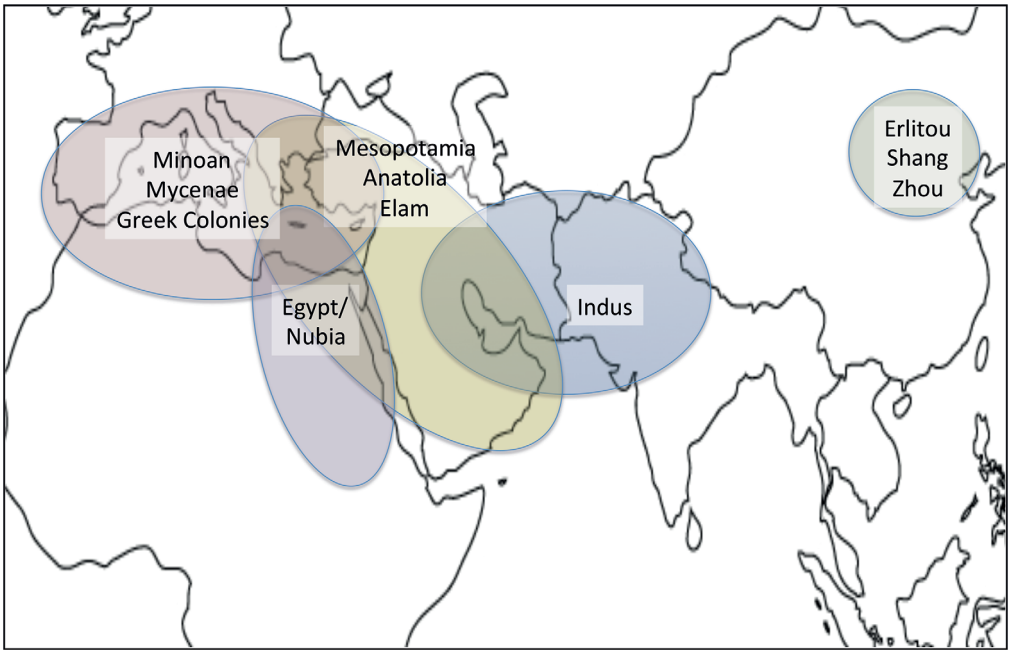


11.2. Modeling trader-politician relations, stability, regulations, and network transformation.

postulates of expected responses to changes in political stability and regulatory environments and resulting structural changes were derived from this model. Specifically, it is posited that:

- High political stability and low regulation are strongly correlated with (more) hierarchical networks and the rise of individual traders, crony capitalism, and overall economic growth.
- Low political stability and high regulation are strongly correlated with (more) distributed networks and the rise of trader peer groups, cartels, and overall economic stagnation/decline.

The results have helped demonstrate the postulated relationship between trader alliance network structure, and political stability and regulation with a high degree of statistical significance (Oka 2011, 2014; Oka et al. 2009a, 2009b). These findings have since been scaled up from refugee camp economies to regional and global trading networks in East Africa and South Asia where our analysis suggests that these transformations between *relatively* more decentralized/distributed and centralized/hierarchical networks are the fundamental underlying mechanisms for the expansion and contraction of trading networks at any level, regardless of the cultural conditions (Oka 2008; Oka et al. 2009a). These findings give a mathematical and testable basis for the "trader network culture," a phenomenon identified by historians, archaeologists, folklorists, and historical sociologists as universal and ubiquitous, that speaks to the underlying similarities of trader behaviors and structures across cultures, times, and scales of activity (Bellina 2003; Curtin 1984; Padgett and McLean 2006). Turning now to the Indian Ocean, from about the fifth century BCE to the sixteenth century AD, it will be shown how this model can be applied to understand the expansion and contraction of global trading networks between Asia and East Africa until the seventeenth century AD.



11.3. Indian Ocean trading world, Bronze Age (2000 BCE)–Iron Age (800 BCE).

INDIAN OCEAN TRADE PRIOR TO 500 BCE

The Indian Ocean was one of the primary forums for trading interactions between the renowned Bronze Age civilizations including the Indus Valley cities, the Elamite Persian Highlands, Mesopotamia, and Egypt, and all places in between (Das Gupta and Das Gupta 2001; Das Gupta and Pearson 1987; Kohl 1987; Pearson 2003; Vink 2007). Archaeological excavations along the southern part of both the east and west coasts of the Red Sea, the Gulf of Oman, and the Rann of Kutch in Gujarat have all revealed material evidence of luxury and even some bulk goods trade between these areas starting around 3000 BCE (Dhavalikar 1999; Kohl 1987; Kusimba 1999; Ratnagar 2001; Ray and Alpers 2007). It is also known that interactions and movements of people, goods, and knowledge predated the Bronze Age by a few millennia based on the presence of African domesticates such as millet and sorghum in Asia, and of Asian domesticates such as plantains in Africa by 6000 BP (Kennedy and Possehl 2012; Lejju, Robertshaw, and Taylor 2006; Weber 1998). Figure 11.3 shows the Bronze Age Interaction sphere.

That trade and commerce played a large role in daily Bronze Age interactions in the Levant, Mesopotamia, and the Elamite Highland is clear from the archaeological and epigraphic record (Lamberg-Karlovsky 1975; Stein 1999, 2002). The Kultepe epigraphic sources from Mesopotamia and Anatolia speak about the various activities of the *karum*, or merchant, communities that operated various

trading ventures that would be considered sophisticated even today, including joint ventures, limited partnership, and what seem to be proto-hedge/equity fund ventures backed by government-merchant collaborations (Barjamovic, this volume; Dercksen 1999; Larsen 1977; Veenhof 1977; Yoffee 2004).

While much textual and archaeological research has revealed the extent of the Bronze Age commercial economy in Mesopotamia and the Mediterranean (see Baryamovic, Galaty, Monroe, and Warburton, this volume; also Knapp 1993; Sherratt 2010; Sherratt and Sherratt 1993), there is a lack of similarly detailed documentation in the economic history of South Asia prior to 500 BCE. However, archaeological research suggests that trade played a large role within the Indus Valley polities that exported finished craft goods such as textiles, and ceramic and stone beads and jewelry to the Mesopotamian polities and possibly North/sub-Saharan Africa (Kennedy and Possehl 2012; Kenoyer 1997). In the Vedic Age, ca. 1500–600 BCE, there are numerous references to merchants, trade, commerce, and the use of maritime technology (Chandra 1977; Singh 1993). The mythical variations of the divine Sarama battling the cattle-hoarding *Pani* (merchants), initially to oppose them but ultimately to acquiesce to them, has been interpreted as a gradual increase in the importance of commercial markets and trade in the Vedic polities by the first millennium BCE (Chandra 1977; Doniger 1975; Kawthekar 1979; Shendge 2003; Singh 1993).

The earliest Vedic text, the Rigveda (ca. 2200 [?]–1500 BCE) refers to *Pani* and its derivative variant *Vani* only twice (Shendge 2003: 43–44). But by the Early-Mid Vedic period (1200–800 BCE), and the subsequent Upanishadic periods (800–500 BCE), the presence of merchants and merchant communities within South Asia was well established in literary sources and in material culture (Chakravarty 2002; Lahiri 1992). Hence, while the Vedic heroine, Sarama, declines into oblivion, the *Pani*/*Vani* persist and provide the etymological roots for words pertaining to trade, commerce and economics, and business activities, for example, *pan*: barter, purchase, buy, risk; *apana*: market, shop; *apanika*: mercantile; *pana*: a coin; *vani*/*bania*: trader; and *vanijya*: commerce (Kawthekar 1979; Lahiri 1992; Shendge 2003). Various passages in the epics *Mahābhārata* and the *Rāmāyana*, dating between the twelfth and eighth centuries BCE, speak about the role of trade and traders and introduce the term *vaishya*[1] for merchant/trader. By the seventh century BCE, the wealth from trade had created a viable powerful merchant class, the *vanijya sresthi*,[2] who challenged the traditional authority of the priests and nobility (Lahiri 1992).

Long "suffering" as a third-tier class under the suspicion of political and intellectual elites that saw mercantile activities as trite and deceitful, these merchant elites converted in large numbers to trade-friendly religions such as Jainism and Buddhism between 500 and 300 BCE (Sharma 1987). The profits deriving from activities that included long-distance trade between South Asia and Central/East/Southeast, and Southwest Asia, the Mediterranean/North

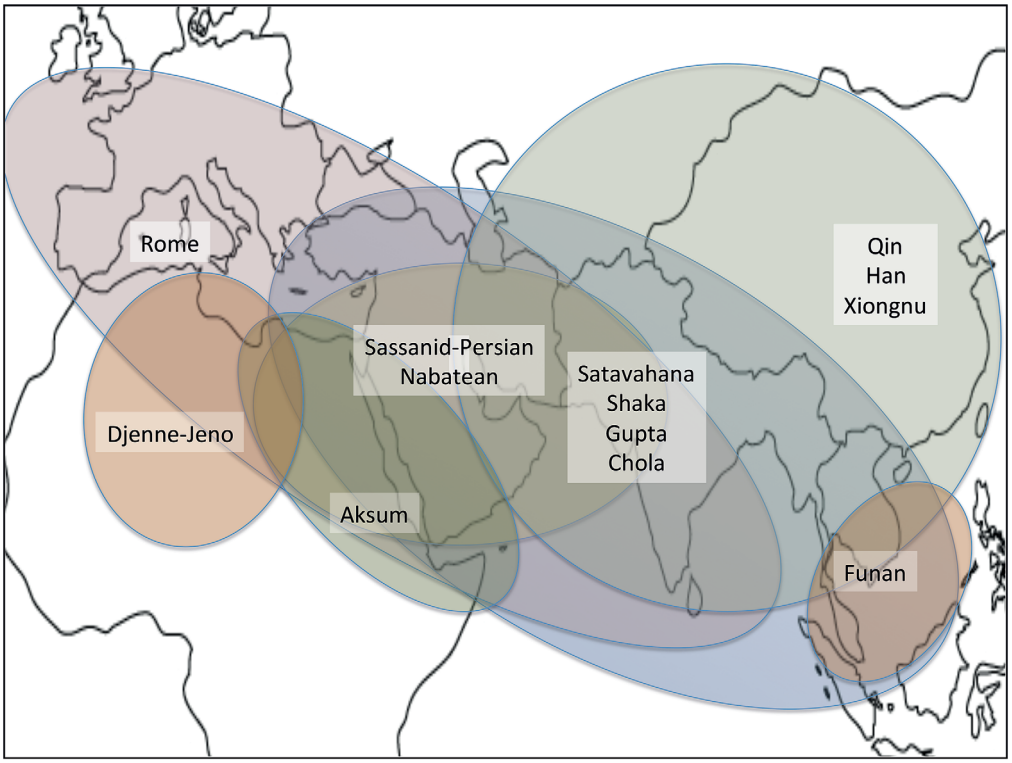
and East Africa, sometimes ranging up to 700 percent per venture, were invested not only in further commercial activities but also in funding the construction and upkeep of public works (see Whitfield this volume; Dhavalikar 1996: 91). As seen in philanthropic activities to this day, Buddhist and Jain merchants funded and patronized the development of arts, architecture, sciences in universities, and built hospitals, hostels, and temples, and ensured that their deeds were recorded for posterity in epigraphic inscriptions as testimony of their generosity and their importance in society (Kulke and Rothermund 1998; Morrison 1995).

The tension between the various states, whose elites' attitudes toward commerce ranged between predatory and tolerant, and the merchants, who usually possessed economic capital and credit-generating abilities beyond the means of the elite, likely limited the political influence of the commercial systems in South Asia until the late Axial Age and the rise of the commerce-friendly Buddhist and some Hindu polities and empires, ca. 300–100 BCE (Altekar 2002; Morrison 1995, 1997). This led to the global trading world of the Early Common Era, where Asian and African imports were necessities in the Roman world despite elite attempts to control their commercial distribution and consumption, and where South Asian consumers were offered a large range of wines from competing Mediterranean wine-producing areas, and might have been given cheap wine from Campania passed off as the highly desired wine from Kos (Cobb 2013; Moore 2011; Pollard 2009; Will 1991).

LATE AXIAL/EARLY COMMON ERA GLOBAL TRADE

The distrust and suspicion of the political and intellectual elites toward mercantilism between 500 and 300 BCE was not a unique South Asian phenomenon. The tremendous wealth and power emerging from commercial activities during the late Axial Age across South and East Asia and the Mediterranean worlds seems to be reflected in a pan-regional debate on the nature of accumulation, excess, and greed (Oka and Kuijt 2014). Anticommerce/trade writings of intellectuals such as Shang Yang, Confucius, and Han Feizi (China); Kautilya, Manu, and Shwetaketu (India); and Pericles, Plato, Aristotle, and Xenophon, and Stoic schools (Greece and Rome) were debating the early utilitarian schools of Mo Zi (China), Charwaka (India), and the Hedonistic, Cyrenaic, and Epicurean schools (Greece and Rome), respectively (Oka and Kuijt 2014). It seems that for the purposes of governance and the larger political economy, the political views on commerce and trade remained in the mildly tolerant or the regulatory modes (Boesche 2003; Fitzpatrick 2011; Rangarajan 1992; Zhang 2007).

Despite the continuing prevalence of these views, the Late Axial/ Early Common Era period, ca. 300–100 BCE, witnessed the emergence of the first



11.4. Indian Ocean trading world, Early Common Era (50 BCE).

truly global trade network that brought together the regional trade networks of Asia, Africa, and Europe in both overland and oceanic trade routes (Casson 1989; Kusimba 1999; McIntosh and McIntosh 1981). These networks had largely been managed by diasporan trading communities including Mediterranean/Levantine, Greek, Phoenician-Carthaginian, Jewish, Arab, Yemeni Hadramaut, Somali and Coastal Bantu-Nilotic, and South/South East/East Asian Buddhists, Hindus and Jain traders (Gogte 1999, 2003; Kusimba 2008; Ray 2003). As the volume and stability of trade grew, so did the role of elites within each of these networks now active within a global trade network, leading to the development of merchant lobbies and even "portfolio capitalists" (Bang 2007; Subrahmanyam 2001b).

The primary factors enabling this transition were the emergence of stable empires and kingdoms stretching from East Asia to West Africa and from the Mediterranean to Southeast Asia between 300 BCE and 300 AD (Figure 11.4). These included the Roman, Aksum, Sassanid, Parthian, Shaka, Gupta, Satavahana, Chola, and Han empires and the Jenne Jeno, Nabeatean, Rhapta, Pandya/Chera, and Funan city-states/polities (see Beaujard 2005, this volume; Kusimba 1999; Ray 2003).

Although these empires may not have been particularly trade friendly, there were many important developments for the regulation and control of commerce as well as ensuring trade revenues.

- First, commerce, at the bare minimum, was tolerated by the state, and even encouraged by nobility who provided the financing for and sponsored craft production, transportation, banking, (limited) futures trading, and other economic commercial activities (Andreau 1999; Jowett 1908; Osborne 1996; Ray 2003; Temin 2001; Woolf 1992; Zhang 2007).
- Second, the fiscal infrastructure in these states included standardization of legal rules and regulations within the territorial boundaries, ensuring both the protection of contracts and redress for commercial disputes (Bang 2007, this volume; Kingsley and Decker 2001; Morrison 1997).
- Third, the amount of trade and commerce between the Mediterranean and Indian Ocean worlds seems to have been enough to cause some concern about deficits and loss of valuable currency, as Pliny the Elder lamented (and perhaps exaggerated the amount) in his *Historia Naturae*:

  > "India, China and the Arabian Peninsula take one hundred million sesterces from our empire per annum at a conservative estimate: that is what our luxuries and women cost us" (Hudson 1931: 34).

- Fourth, the growth of global trade was backed by the regularization of financial and credit transfer instruments and letters within empires but also backed by networks of bankers, merchants, and agents located in port cities and gateway settlements across the Old World (Andreau 1999; Kingsley and Decker 2001; Morrison 1995).
- The growth of a larger economy based on competition within regions for consumers and markets, namely for commodities such as wines, perfumes, spices, and so forth can be observed. This competitive economy also generated attempts at imitation and (possibly) import substitution to maximize benefits from entrepreneurial production and trade (Lawall and van Alfen 2011; Osborne 1996).

Most economic historians and archaeologists of the Common Era, including Moses Finley would agree, contrary to Polanyi et al. (1957), that, between 100 BCE and 100 AD, the articulated and overlapping commercial and trade networks within and between kingdoms and polities from between 500 and 300 BCE started to shift toward a (relatively) more globalized commercial exchange as traders were able to undertake larger commercial ventures with the (limited) backing or protection of the various states and polities involved (Fitzpatrick 2011). Like the Bronze Age (see Barjamovic, Monroe, and Warburton, this volume), the Classical Age also had traders, merchants, markets, and banks, that were *not* administered and controlled as suggested by Polanyi and the substantivists, but were regulated and even supported by the political elites or the state (Andreau 1999; Kingsley and Decker 2001).

However, full global integration was *not* achieved in the Common Era (see also Fitzpatrick 2011; Paterson 1998; Young 2001). While trade imbalances did cause deficits, these were not considered important enough to affect fiscal policy except attempts to control or regulate this commerce (Pollard 2009). Similarly, although import substitution and imitative production activities documented in this period might have potentially enabled elites to capture overseas markets and to retain control of regional markets, the scale of these activities remained local/regional with little encouragement from political patrons (Lawall and van Alfen 2011). Gary Young argues that not even "one major policy initiative of the Roman government in the period under consideration that can be attributed to the needs of this commerce" (2001: 219). Similar arguments can be made for the lack of imperial policies encouraging commerce in Han China or the Maurya/Gupta Empires in South Asia (Ray 2003; Zhang 2007). Besides government policies, there were no other indicators of globalized commerce, such as price convergence or pan-regional increase in wages or salaries for freeborn citizens of these states (O'Rourke and Williamson 2002). While standardization of commercial regulations and laws was achieved within the territorial states, there was no evidence that states were able to influence each other toward any commercial standardization, nor were the emergent major traders and merchants that Subrahmanyam (2001b) and Bang (2007, this volume) refer to as Portfolio Capitalists, able to influence political elites to collaborate to create such protection across political boundaries and economic cores. Although sophisticated and truly global in its reach, this trading world did not achieve the kind of globalization that can be seen following the sixteenth and seventeenth centuries AD.

The first and foremost reason for this change was of course that the states were not highly invested in the trading and commercial ventures and hence traders and merchants operated with what would be called a "growth ceiling" (Oka 2008). Second, the total amount of import-exports between any two polities seems to have been less than the agricultural and commercial economies within the polities, creating little or no incentive for political elites to make any real and lasting fiscal policy changes favoring commercial sectors (Paterson 1998; Young 2001). Third, and very importantly, most of these core empires collapsed between 300 and 500 AD under the conditions of increasing internecine and external conflict, and a decline in climatic conditions (dryer/colder) starting in the third century AD (Dhavalikar 2002; Sharma 1987).

The combined effects of climate decline, internal corruption, and infrastructural breakdown were massively compounded by the never-ending attritional war between these empires and Central Asian pastoral peoples such as the Yueh Chi, the Huns, and the Goths (Barfield 2001; Bronson 1988). The core empires of the Han, Gupta, and Romans all underwent increasing instability and loss of territory, saw the increase of regional power struggles, and

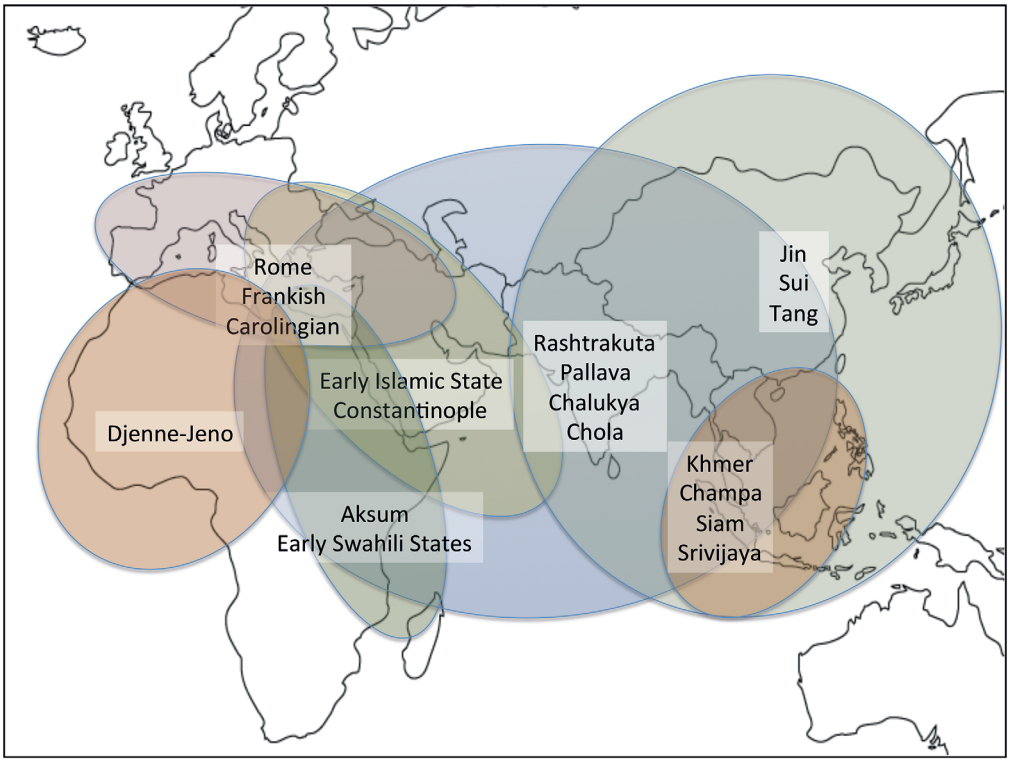
the ineffectual reign of later monarchs and emperors between the fourth and fifth centuries AD (Bronson 1988; Dhavalikar 1996; Sharma 1987; Tainter 1988, 2006). The three centuries that followed were characterized by increasing regionalization, conflict, and instability across Afro-Eurasia. As explained in the next section, this period, although not noted for major innovations and developments in trade and commerce was nonetheless instrumental in the persistence and resilience of the regional trading network ruled by the ethnic trader middleman as the basic structural unit of global trade (Landa 1994).

FROM THE DARK AGES INTO THE LONG EIGHTH CENTURY

The period formerly called the Dark Ages has been reanalyzed as a complex epoch of regionalization across the remnants of the Old World core civilizations, driven by competing polities and cycling chiefdoms in Europe, the Middle East, and South and Southeast Asia (Champakalakshmi 1999; Hodges 1989, 1997; O'Brien and Roseberry 1991). However, the most important pertinent observation for the purposes of this chapter is that the overlapping regional trading networks within each these polities continued to function and thrive, albeit on a smaller scale (Champakalakshmi 1999; Curtin 1984; Latouche 2006). Although traders and merchants could no longer rely on the unstable polities and weak institutions to provide protection, they retained and invested in the "trader network culture" and developed various institutions that strengthened the resilience of regional trading networks and the role of the ethnic middleman trader (Landa 1994; see also Oka and Kusimba 2008).

Between the fifth and seventh centuries AD, the various polities in East, South, and Southwest Asia struggled to consolidate their territorial integrity in the face of consistent attacks radiating outward from Central Asia largely by the Huns. The annals of the later Gupta and Han periods and the final days of the Western Roman Empire were almost continuously concerned with defending their borders from "barbarian invaders" (Barfield 2001; Bronson 1988). The Sassanid and the Eastern Roman Empires, the only Common Era empires to continuously exist between the third and seventh centuries AD, were both similarly affected and lost large amounts of territories to the warring groups whose frequent low-cost predatory attacks on the borders of states lead to increasing attrition of revenue and to the declining marginal returns on state investment and organizational efficiency (Tainter 1988, 2006).

The status of trade and commerce during these tumultuous times was definitely problematic. Traders enabled the prestige goods networks that brought in the exotic preciosities sought by political elites to compete with each other and to make and maintain diplomatic and friendship alliances. Traders were also individuals who could be relied upon to generate capital that could be used for financing deficit, public debts, wars, or for mitigating food crises,



11.5. Indian Ocean trading world, regionalization, and the "Dark Ages" (700 AD).

and so forth (Abraham 1988; Sarkar 1914). Given the lack of dependability of political continuity and governance and the need to maximize material gain, political elites frequently subjected traders to punitive "shakedowns" and *ad hoc* demands for taxes, levies, and other fees (Sarkar 1914). South Asian texts written during this period on kingship and governance, namely the *Harshacharitra* and the *Sukraniti*, caution against the frequent raids and confiscations of merchant wealth as a means to finance state treasuries as it led to the emigration of traders from the predatory state and the eventual loss of trade revenues, prestige goods, and a source of immediate capitalization (Jain 1990; Sarkar 1914).

Despite these problems, the great profits from long-distance trade did not cease as the global demand for exotic commodities continued unabated, especially from the multiple elites in the various conflicting polities across the Indian Ocean world. For example, the South Asian chronicler Varahamihira mentions in the sixth century AD that "a traveller to [Southeast Asia or East Africa] was likely to ne'er return; but if he did, was likely to realize profits of 700%" (Dhavalikar 1996: 95). In this case, the trader network then shifts to the regional network that is focused on moving goods across various parts of a particular area, but with significant overlap across regions, especially in prestige goods exchange. This overlap was largely managed by systems of relationships

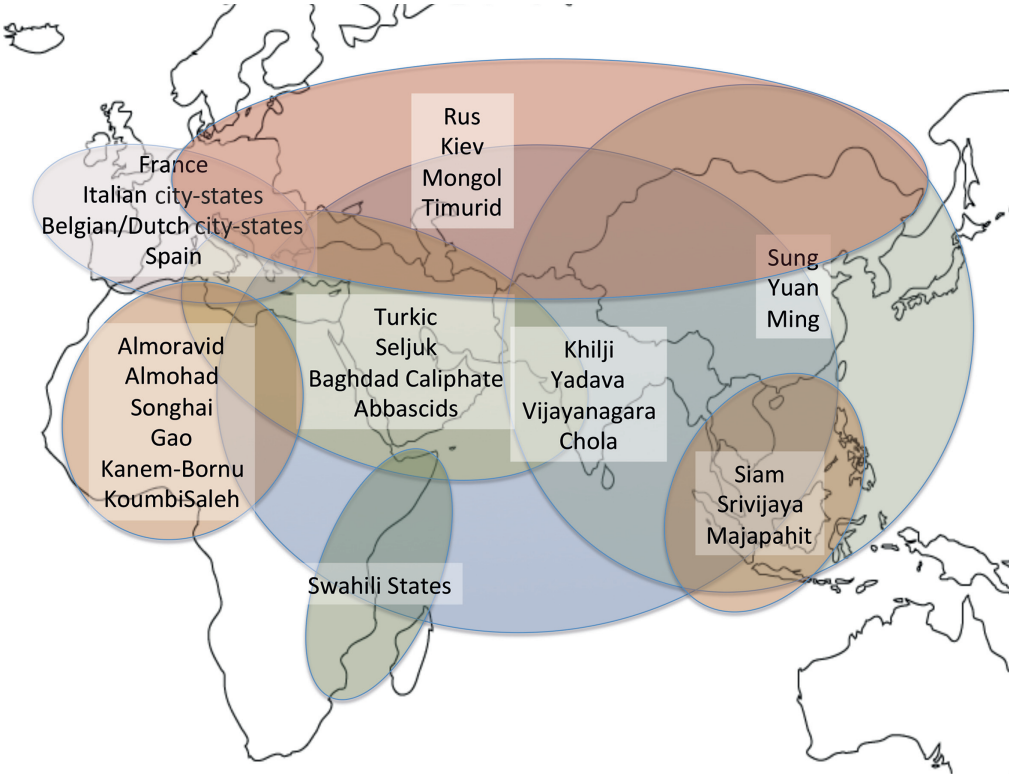
between prominent members of ethnic trading groups who could vouch for each other's trustworthiness, reputations, and abilities, and, thus, bridge ethnic boundaries (Hunt and Murray 1999; see explanation in Landa 1994). In this way, even as the flow of goods *within* regional networks remained largely within particular ethnic trading groups and was many times larger than the flow of goods *between* regional networks, the institutions of trust between ethnic groups across regions enabled Chinese, South Asian Hindu and Jain, Jewish, Zoroastrian, and Christian business peoples to travel long distance or to import/export valuable commodities.

The fear of external violence and constant suspicion from their social and political environments led traders to invest in their own networks and develop systems of redress that did not need political interference and that emphasized restraint and low social visibility (Chattopadhyaya 1994). These institutions gave rise to protected partnerships and innovations akin to insurance and other systems of legal protection that would be key in the resurgence of global trade following the rise of Islam and the Long Eighth Century (Gaimster, this volume; Hansen and Wickham 2000). However, for similar reasons as that affecting the global trade of the Early Common Era, it will be shown that this trading complex also reached its apogee by 1300 AD, without truly globally integrating the various regional economies into one system.

TRADE AND COMMERCE 800–1300 AD AND ITS LIMITATION

One of the key factors underlying the growth of trade and merchant activities in the Early Common Era, at least in Asia, was the rise of trade-friendly religions such as Jainism and Buddhism, even though these did not directly affect the political and ideological systems of areas beyond Asia.[3] The rise of Christianity, although affecting various regions in Afro-Eurasia, was not a true global movement, at least in the first millennium AD, as the relationship of trade, commerce, and Christianity remained oppositional following the Pauline teachings on wealth, greed, and sin (Oka and Kuijt 2014). The first religion to become a truly global force that merged trade, ideology, and polity together was Islam, founded by Arab merchants and warriors (Heck 2006; Udovitch 1970).

Most of the focus in research on the early days of Islam is concentrated on the rapid victories of Islamic armies as they spread across the Levant, North Africa, Central Asia, and Southeast Asia. However, the wider Indian Ocean world, especially East Africa, Peninsular South Asia, and Southeast and East Asia were not subject to military conquest or conflict. Islam spread in these regions through the interaction of Arab and Persian traders with their local clients and political patrons, the extent of which is seen in Figure 11.6.



11.6. Indian Ocean trading world, Islamic trade and the Medieval Era (1300 AD).

Recent scholarship on the spread of Islam in Africa and South/Southeast Asia suggests that rulers and prominent merchants in these areas converted to Islam, recognizing no doubt its eschatological and cosmological, but also its global economic and political benefits (Hall 1981; Heck 2006; Pearson 1996; see Kusimba, this volume; Junker, this volume). The centrality of brotherhood in Islam and the insistence on discarding ethnic and racial boundaries meant that Islamic law applied to all Muslims, regardless of their origins. This standardization applied not just to social and political laws but also to commercial contracts and regulations (Udovitch 1970). The idea that a trader from Songhai in West Africa could find protection and redress for their ventures in Malacca in Southeast Asia provided a powerful incentive to convert and for non-Muslim rulers in these areas to promote Islamic traders and merchants (Hall 1981; Pearson 1996).

The strong regional networks generated in the regionalized political systems of the "Dark Ages" evolved into global networks that supported transregional institutions whereby commercial transactions, agreements, and disputes were determined according to both local and Islamic jurisprudence (Pearson 1996). Like the Early Common Era, the period between the eighth and the twelfth/thirteenth centuries represented a truly global period in which:

- Strong and "relatively" stable polities and kingdoms sponsored trade, commerce, and other transregional interactions, and protected traders and invested in trade infrastructure (Jain 1990).
- The spread of Islam from West Africa to Southeast Asia and from Central Asia to Southeastern Africa brought together a diverse group of traders, goods, and services (Pearson 1994).
- Mecca and the Caliphate at Baghdad provided a central gathering place for scholars, traders, and pilgrims alike (Pearson 1996).

It is clear that the rise in political stability, especially during the ninth and tenth centuries AD was another key factor along with Islam in the growth of trade and commerce. These two centuries witnessed the rise of kingdoms/empires such as the Tang (China), Srivajaya, Angkor Vat, and the Malay Sultanates (Southeast Asia); the Chola, Chera, and Pandya kingdoms (South India); Rashtrakutas, Satavahanas, and Chalukyas (North India); the Arab and Turkish Sultanates in Persia; the Ummayad and Abbascid Caliphates (Middle East and North Africa); the Somali and Swahili city-states (East Africa); the Zagwe and Solomonid kindgoms (Ethiopia); and Jenne, Gao, and Songhai (Sahelian West and Central Africa) (Abu-Lughod 1991; Curtin 1984; Oka and Kusimba 2008). Great developments in trade and commerce during this time included the institutionalization of commenda and other limited partnerships, insurance, and other developments in banking and credit transfer technology and theory (Goitein and Friedman 2008; Udovitch 1970). Advancements in the sciences, arts, architecture, engineering, and manufacture were sponsored by political and commercial elites. These groups also sought to introduce innovations in fiscal matters of state, for example, paper currency, advanced accounting techniques, the decimal system for sophisticated calculation of interest rates, and even some institutionalization in futures trading and markets[4] (Abu-Lughod 1991; Naqvi 1986).

As Abu-Lughod (1991) argues, this era provides much of the bases for the global commerce seen in the contemporary world. Why did it not develop into a fully integrated global commercial system? Arguably, this global trading encounter was limited for similar reasons as those for the Early Common Era.

First, despite the presence of global trade networks that integrated various regional systems and some limited evidence of price convergence as well as transregional market elasticity, the level of trade and commerce within any polity remained greater than the trade between polities.

Second, similar to the cool/dry epoch in the fifth and sixth centuries AD (Dhavalikar 2002; Sharma 1987), the global climate condition also changed in the fourteenth century AD – from the warm/wet conditions of the Medieval Warming Period to the cold/dry climate of the Little Ice Age that dominated global climatic conditions between 1350 and 1850 AD (Fagan 2000).

Third, and in what is now a familiar pattern with familiar suspects, these polities found long-term consolidation difficult, especially after the tenth century AD in the core areas adjoining the Central Asian plateaus and steppes. A series of invasions that lasted for more than two centuries (tenth through thirteenth centuries AD), similar to those of the Huns in the fourth through sixth century AD, brought Turkic, Afghani, and Mongol conquerors to the richer areas of South Asia, the Middle East and the Levant, and Central/Eastern Europe. These groups were highly successful in conquest but found consolidation very problematic. Not only did they have to subdue and rule wary and rebellious populations in their newly established kingdoms, but they also had to contend with the next invading Central Asian group on their heels (Naqvi 1986).

Fourth, the intensification of the Central Asian shock invasions seems to have framed the three centuries between the rise of Genghis Khan, ca. 1250, and of Timurlane, ca. 1360–1405 AD. The Mongol attacks affected all of the Turkic and Afghani polities along the South Asian and Middle Eastern borders of the Mongol polity, bringing down the Seljuks in the Levant, the Abbascids in Baghdad, the Sung Dynasty in China, and the various Sultanates in South Asia (Font 2011; Naqvi 1986). While the Central Asian Mongol polity broke up quickly after the death of Genghis Khan, with the exception of the Mongol Yuan dynasty in China, none of the other parts of Genghis Khan's empire maintained much territorial integrity or stability (Morgan and Morgan 2009). Constant fighting between princes and noblemen continued until the late fourteenth century and the rise of Timurlane and his Transoxanian Empire. Like Genghis Khan, Timurlane was also a brilliant warrior and raided/defeated every polity along his borders, and was as quick to launch punitive attacks, as he was slow to bring stable rule to his own empire or the surrounding tributary states (Nicolle 1990). His Transoxanian empire also collapsed through internecine conflict and led to the creation of a series of small polities across Central Asia, ruled by Uzbek and Mongol (Mughal) princes (Mukhminova 1996).

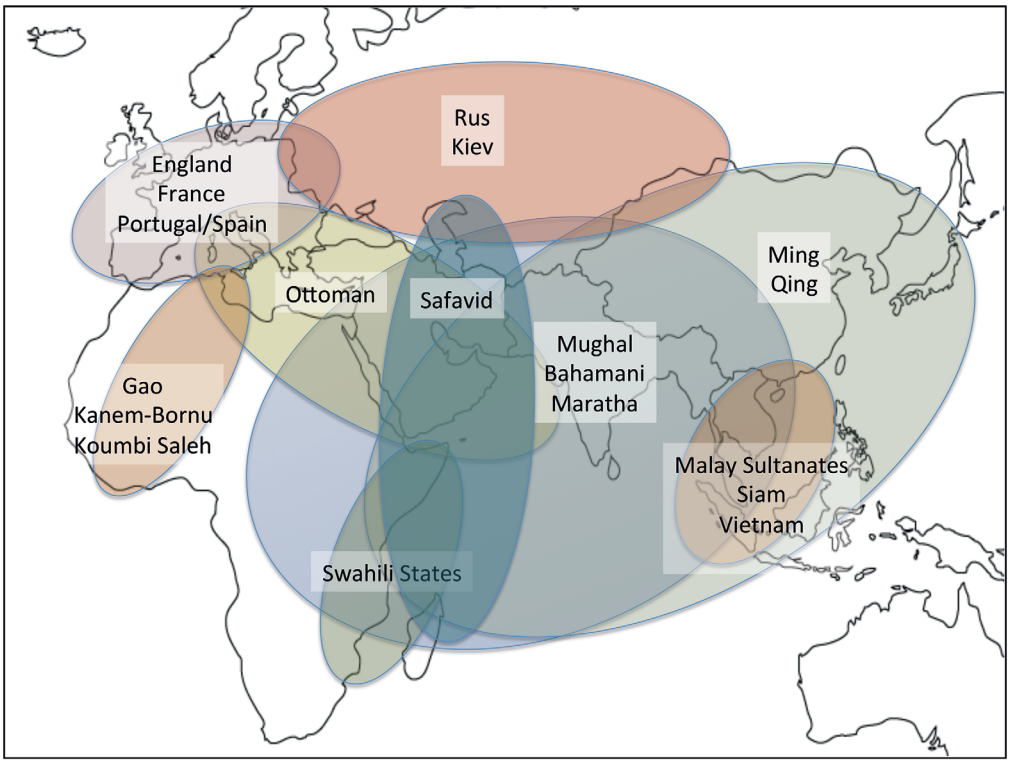
The one major difference between the inabilities of the Early Common Era and the late-first/early-second millennium global trade interactions is that, while the end of the former saw a decline and possible downshift in trade, the period between 1250 and 1450 AD did not see a decline in global trade; rather, it seems to have plateaued. Following Abu-Lughod's (1991) argument, this period laid the groundwork for the global commercial economy that emerged after 1600 AD, but that economy was spurred by both the unprecedented growth in stability and trade friendliness in the Indian Ocean world, enabled by the Islamic détente, and the increased interactions of Europeans as actors, enabled by New World wealth.

THE ISLAMIC DÉTENTE AND THE RISE OF GLOBALIZED INTEGRATED ECONOMIES

Following the death of Timurlane in 1405, the now independent Ottoman consolidated their empire across North and Northeastern Africa, the Arabian Peninsula and its littoral, the Levant, and Western Asia, and started making forays into Europe following the fall of Constantinople in 1453 AD (Finkel 2006). Stretching from Eastern Europe to Central Asia and North Africa, the Ottoman Empire consolidated a vast area with diverse cultures and enforced legal and commercial standardization following Islamic jurisprudence. In 1501 AD, the Safavid Empire under Shaikh Ismail I consolidated Persia and the Bactrian plateau. Coming up against the Ottoman in Anatolia, the Safavids battled with the Ottoman at Chaldiran in 1514 and signed the Treaty of Amasia in 1561 AD. Although the Chaldiran battle was won by the Ottomans, both sides recognized the attritional costs of further war and drew their boundaries to reflect political and military realities leading to tense diplomacy but fewer wars over the next two centuries (Allouche 1983). Meanwhile, Babur, one of the descendants of Timur and scion of the eastern Mongol princes in Bukhara, unable and unwilling to constantly fight the Uzbeks for control of his territory, marched into India in 1526, defeating the Lodi Sultanate at the battle of Panipat, and established the Mughal Empire (Moosvi 1987). The Mughals were descendants of both Genghis Khan and Timurlane, and considered themselves the rulers of the Islamic World and the overlords of the Ottoman despite the latter being the Caliph.[5] They also had help from the Safavids in both their Uzbek wars and Indian campaigns (Farooqi 1989).

This conflict led to enduring levels of mutual distrust between Sunni Mughals and the Sunni Ottoman; hostile diplomacy between the Shia Safavids and the Sunni Ottoman over mutual borders and over the actions of the Uzbeks; and friendship between the Shia Safavids and Sunni Mughals, occasionally marred by border skirmishes (Allouche 1983; Barzegar 2000; Farooqi 1989). These tensions meant that any alliance between two polities against a third never lasted beyond a few initial attempts; and none of these polities could individually prevail in war against any other for any enduring period for logistical and geographical reasons. The ensuing realpolitik forced a détente upon a world in which three Islamic empires would rule for the next two and a half centuries (Oka 2008; Oka et al. 2009a). In this world, traders would eventually enjoy the full conditions of political stability where more than half of the world's population would be ruled by three families (Table 11.1 and Figure 11.7).

The key point here is that, like the Early Common Era, these three empires maintained stability. However, that they all followed Islamic rules and jurisprudence allowed the generation of standardized rules, laws, and regulation



11.7. Indian Ocean trading world, imperial détente and the Early Modern Era (1650 AD).

TABLE 11.1 *Islamic Détente under the Ottoman, Safavid, and Mughal Empires, Three Families from the Fifteenth through Eighteenth Centuries AD*

Ottoman Sultans		Safavid Shahs		Mughal Padishahs	
Bayazid II	1481–1515	Ismail I	1501–1524	Babur	1526–1530
Salim I	1512–1520	Tahmasp I	1524–1576		
Suleiman I	1520–1566	Ismail II	1576–1578	Humayun	1530–1556
Salim II	1566–1574	Muhammad Khuda Banda	1578–1587	Akbar	1556–1605
Murad III	1574–1595	Abbas I	1587–1629		
Muhammad III	1595–1603	Safi	1629–1642	Jahangir	1605–1627
Ahmed	1603–1617	Abbas II	1642–1666		
Mustapha	1617–1623	Suleiman	1666–1694		
Osman	1617–1622			Shah Jahan	1627–1658
Murad IV	1623–1640	Sultan Hussein	1694–1722		
Ibrahim	1640–1648				
Muhammad IV	1648–1687	Tahmasp II	1722–1731	Aurangzeb	1658–1707
Suleiman II	1687–1691	Abbas III	1731–1736		

of commerce across imperial boundaries. These states were also trade friendly (more the Mughals and the Safavids than the Ottoman) and invested heavily in attracting entrepreneurs, merchants, bankers, and other commercial specialists to their domains through partnerships, tax breaks, access to facilities, provision of cheap labor, and, where required, subsidies to ensure greater production (Alam and Surbrahmanyam 1998; Barzegar 2000; Jabbari 2004).

As various scholars have pointed out, the status of traders changed perceptibly in the late sixteenth century in the Mughal Empire when trading communities and individuals were able to sway political and fiscal decisions of the state, where merchant princes could display their wealth with impunity, and where mercantile expertise such as banking and credit transfer became central to the revenue collection, administration, and organization of the state treasury (Alam and Subrahmanyam 1998; Farooqi 1989; Leonard 1998; Moosvi 1987). Far from being the middleman nodes in a trading network, the emergent group of politically connected traders, portfolio capitalists, unlike their counterparts in the Early Common Era and even the large merchant guilds/consortia in the late first to early second millennium AD, were truly powerful in terms of both economic wealth and political status (Farooqi 1989). In the seventeenth and eighteenth centuries, South Asian, Persian, and even Ottoman traders were seeking and obtaining credentials and legitimacy as nobility through marriages and other relationships (Calmard 2000; Subrahmanyam 2000).[6]

In this world of the sixteenth and seventeenth centuries, the arrival of the Europeans did not make a significant dent in Indian Ocean commerce, as the goods brought by the Europeans were not in high demand, their initial purchasing power was negligible, and they were unable to militarily engage the terrestrial polities (Pearson 1998). However, their maritime prowess and naval might allowed the Europeans to introduce the potential of naval expansion. The "age of partnership" between powerful Asian and African trading and naval groups, and the European traders created an alternative system of power in the Indian Ocean (Kling and Pearson 1979). Countering the terrestrial empires that controlled the hinterland production of coveted goods in Asia, the maritime powers had the ability to expand across oceans in both commerce and coastal conquest (Oka et al. 2009a). However, while terrestrial empires lacked the power and ability to expand into maritime commerce and conquest, the maritime powers were powerless against the terrestrial might of the empires and lacked the power to access hinterland goods.

This was the world that the trader, merchant, and the portfolio capitalist spanned effortlessly, accessing hinterland goods and overseas markers/consumers, and charging all parties for any increase in transaction cost and labor. Even the various food crises and famines between 1500 and 1700 AD led to the outsourcing of famine relief to traders already invested in well-established

commodities markets rather than the government (Bayly 1988; Dunstan 2006; Will 1990).

The primary indicators of globalization began after ca. 1600 AD with increasing price convergence for various commercially produced commodities available with minimal effort for a global clientele (O'Rourke and Williamson 2002). Particularly, this was initiated with the advent of plantation economies focused on agricultural commodities (coffee, sugar, tea, cloves, and pepper) and cattle ranching in both the Old World and New World. These commodities were targeted at a global elite clientele in the urban cores and polities in Asia, Africa, and Europe and became coupled with the already export-oriented commercialized staple and luxury goods economies in the empires across Asia and Africa.

The most important factor in this globalization is that the total amount and value of trade and commerce *between* any two core areas gradually increased and then dwarfed the amount and value of trade *within* each region by the eighteenth century (Chaudhuri 1996). Given the growing global demand for both luxuries and value-added commodities, the revenues accruing from transregional and regional commerce were greater than agricultural revenues within each region. Anticipating Bayly (1988) and Hardiman (1996), historian Iqtidar Alam Khan (1976: 28–29) chronicled in the late sixteenth and early seventeenth centuries AD:

> A widespread prevalence of money economy resulting from a growing trend of production for market in agricultural as well as non-agricultural sectors, linking of the internal market with world commerce through long-distance trade in which commerce by the European trading companies became increasingly important; and the existence of considerable merchant capital which controlled large sectors of small-scale commodity production in urban centres through different forms of the putting-out system, [and the presence] of quite numerous groups of merchants, bankers and people belonging to other professions wielding considerable influence within society.

This was followed by the rise of similar groups in the Safavid and Ottoman empires in the seventeenth century and then within Western Europe by the late seventeenth and eighteenth centuries (Calmard 2000; Thomson 1996). The value of interstate and overseas trade for both the political and business elites and the laboring masses had grown large enough by 1690 for Sir Josia Child, a factor in the British East India Company in Surat, to observe that the Indian Emperor "derived more revenues from the [exported] manufactures in his land [and] that it could give him no pleasure to see his subjects want for employment," as it was within the company's (and other naval groups' and traders') power to interrupt his trade (Chaudhuri 1996: 353). The importance of trade to these empires resulted in various changes to state fiscal policies including tax

breaks or cuts, protection of credit and banking systems, and cheap/subsidized resources to encourage entrepreneurial production and trade and to attract merchant interest and capital from both local and overseas merchants (Barzegar 2000; Jabbari 2004; Moosvi 1987). The traveler Count de Gobineau observed that, during fiscal changes initiated by the Safavid Shah Abbas II in the mid-seventeenth century AD, "merchants [became] free of tax paying" (Jabbari 2004: 106) These policy changes within the Mughal, Safavid, and Ottoman empires in the seventeenth century AD, and in Western Europe and China in the eighteenth century AD, stand in stark contrast to the relative lack of commerce-friendly changes in state fiscal policies of either the Early Common Era or the medieval period.

The late seventeenth and early eighteenth centuries also witnessed a growth in the frequency of transregional impacts of fluctuations in market and government stability in the various empires (Dale 2002). For example, the fall of the Safavid Empire to the Durrani Afghans in 1722 had a drastic impact on textile businesses from South Asia to Europe and may have stymied a planned flooding of European markets with cheap Indian cloth through Russia and the Baltic regions (Dale 2002). Similarly, the intensified production of cheap ivory from East Africa helped British and Indian traders reduce the need for silver bullion and in turn drastically minimized the global trade deficit with the Chinese in the eighteenth and nineteenth centuries (Oka et al. 2009a. Other practices that arose during this period include import substitution and competitive imitative production as entrepreneurs took advantage of increased demand from overseas markets; resources and facilities offered by political elites; and the cheap labor from famine devastated rural areas to actively produce goods specifically for overseas and local markets. Examples include the imitative production of Chinese blue-and-white porcelains in Southeast Asia and the Middle East/North Africa as well as Middle Eastern/North Africa glazed wares in South Asia (Oka et al. 2009b).

The imitation of African cloth by South Asian producers was part of a larger predatory commerce that resulted in flooding the African markets with cheap cloth offered at costs that ruined local manufacturers. The local elites were subsumed within this larger economy through gifts and percentages of profits, which in turn led to these elites disinvesting in local manufacturing economies. The emergent emphasis lay instead on extractive economies initially based on the direct export of raw materials, including ivory, slavery, gemstones, animal products, and, later in the eighteenth and nineteenth centuries, on plantation economies focusing on spices, coffee, pepper, tea, opium, and rubber (Oka 2008; Oka et al. 2009b; Pearson 1998).

Pressure groups consisted of politically connected portfolio capitalists, great firms, and cartels that emerged as controlling influences over vital parts of government financial administration (Bowen 2006; Calmard 2000; Leonard 1998;

Subrahmanyam 2000. By changing laws to further protect the aforementioned behaviors with complicit elites increasing dependence upon trade revenues and their own profits from commercial investments, the governance shifted to serve commerce rather than promote commerce in service of the polity. In short, when Adam Smith decried mercantilism, the idea of the "nation ruled by shopkeepers" and the "strange absurdity, [where traders] regard the character of the sovereign as but an appendix to that of the trader, as something which ought to be made subservient to it," he assumed that system to be normative, when, in reality, it was barely two centuries old (Smith 1976: 637).[7]

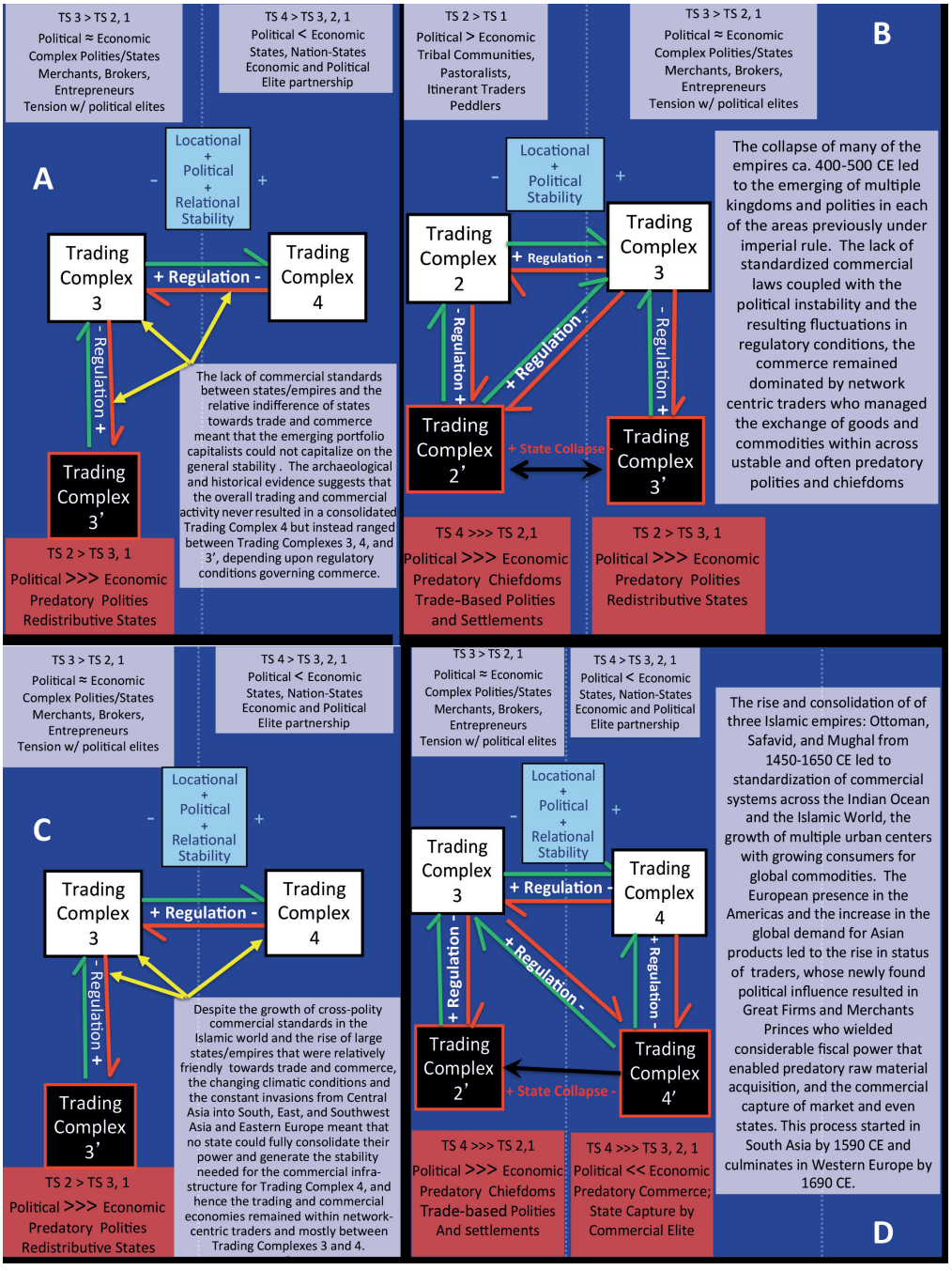
The impacts of the post-1600 Islamic détente-commercial world led to the decline of 70 percent of trading cities and ports across the Indian Ocean; an increasing demand for goods based on extraction of raw materials and cheap labor; a world where commercial decisions would guide political movements, not vice versa; and a transformation in the manner of consumption. The Great Transformation was not merely the development of market economies but in the growing importance of external demand and of trade between rather than within production zones, and dependence of political elites on global demands and consumption.

APPLYING THE TRADING SYSTEMS MODEL TO THIS VAST PERIOD

Analyzing the period between 500 BCE and 1500 AD is a difficult task, and the TSM aids us conceptually in understanding (1) how traders shift and expand/contract the nature of their networks to respond to the various changes outlined in the previous sections, and (2) how these shifts, expansions, and contractions in turn affect political and commercial economies.

The late Axial Age/Early Common Era developments suggest a shift from TS3 → TS4, and would seem to suggest a corresponding shift in the emergent complexes from TC3/TC'3 → TC4. However, when examining the global trade networks of the Early Common Era, this shift does not come to fruition, for the reasons mentioned previously, as well as the fact that the merchants, although powerful within their own polities and the regional and global trade networks did not bridge significant structural holes, as they tried to maintain network redundancy in the face of predatory or even tolerant elites.[8] Therefore, even as their efforts resulted in a global flow of goods, peoples, and services across Afro-Eurasia using TS4 behaviors, the TC shift remained between TC3/TC'3 and TC4 for most of the Early Common Era (Figure 11.8a). The so-called Dark Ages between 400 and 700 AD, by contrast, saw a downshift in the trading behaviors (TS4/3 → TS 3/2) and the emergence of predatory polities marked by instability (TC4/3 → TC3/TC'3/TC'2), as seen in Figure 11.8b.

The investment in resilient networks and institutions of trust were seminal in the growth of global trade and commerce in the period between 700



11.8. Transitions in trading systems/complexes from 500 BCE to 1700 AD: (a) 500 BCE–400 AD, (b) 400–700 AD, (c) 700–1500 AD, and (d) 1500–1700 AD.

and 1300 where, akin to the Early Common Era, a shift occurs from TS 2/3 → TS 3/4, with a similar shift in the trading complex: TC'2/TC3/ TC'3 → TC3/4 (Figure 11.8c). Again, for reasons mentioned in previous sections, this shift also remained between TC3 and TC 4, but, unlike the regionalization after 300 AD, there was no downshift in the trading systems or complex, both remaining at TS3/4 and TC3/4 until the sixteenth century. Because of the Imperial Détente and the unprecedented increase in political stability and trade friendliness backed by near-global standardization of commercial rules and regulations under Islamic law, the rise of maritime commerce and the Europeans, and other reasons mentioned before, the late sixteenth and seventeenth centuries witnessed the shift from TS 3/4 → TS 4 and TC3/TC'3 → TC4, as seen in Figure 11.8d.

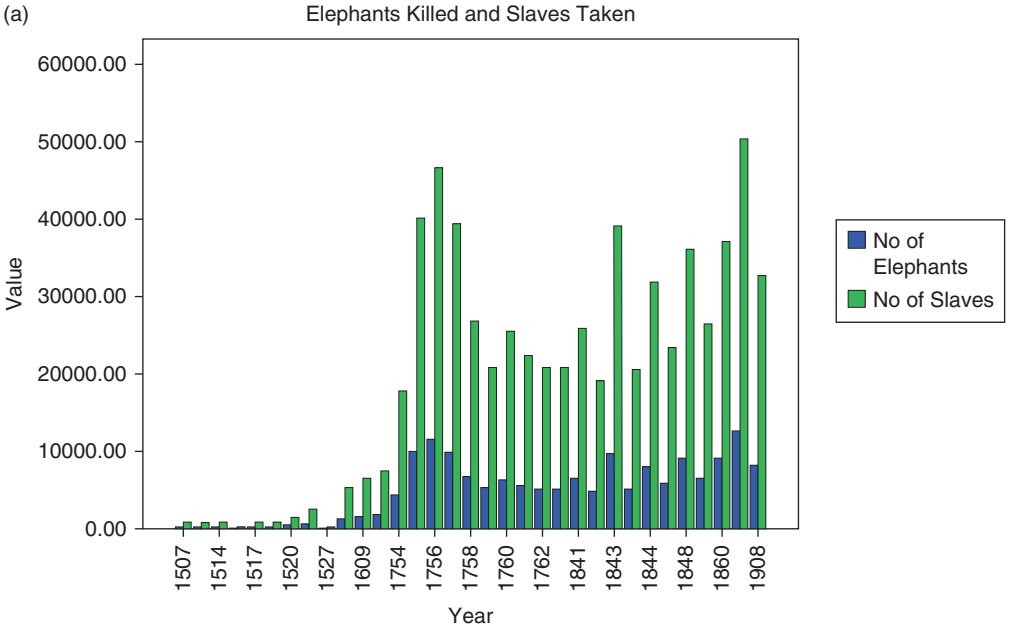
In fact, in some of the polities, especially on the peripheries, for example, Southeast Asia, East Africa, the shift went on to full predatory commerce including state capture, extractive economies, and disinvestment in local production in these polities, or TC3/TC'3 → TC4/TC'4 (Leonard 1998; Oka et al. 2009a) (Figure 11.8d).

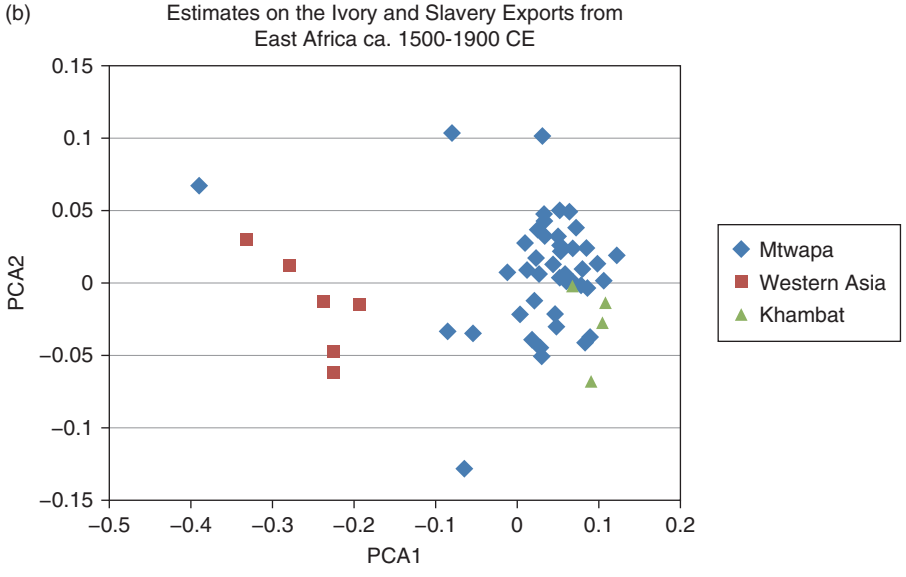
The question is, how may these shifts be tested archaeologically, or in other words, what would be the material correlates of a given phase transition, $TC_n \longleftrightarrow TC_{n\pm1}$? To test these postulated shifts, a case study from the port city of Mtwapa, in Kenya, East Africa, will be presented. A thriving trade port that emerged in the late first millennium AD, Mtwapa was a medium-sized trading center with established local production strengths in cloth and iron manufacturing (Kusimba 1999; Robertshaw 2003). Based on the attested growth of commercial predatory economies in the sixteenth and seventeenth centuries, this period witnessed the shift from TC3/TC'3 → TC4/TC'4, as seen in the ivory exports (Figure 11.9a) and the dumping of imitative South Asian glazed wares (Figure 11.9b). Specifically, at Mtwapa, it was expected that there would be:

1. General growth in elite wealth, evidenced by the larger increase in exotica and prestige gifts as well competitive status displays (specifically in areas 4, 5, 6, 9, and 10);
2. A decline in local manufacturing (iron and cloth) and associated elite manufacturing workshops (areas 5 and 6); and
3. Emergent elites unconnected to local production (not areas 5 and 6).

These hypothesized correlates for the TSM are clearly seen in the changing distribution of prestige ceramics, namely blue-and-white porcelain, glazed wares (Middle Eastern, North African, and South Asia), celadon (East, Southeast and West Asia, and North Africa), and white porcelain (East and Southeast Asia).

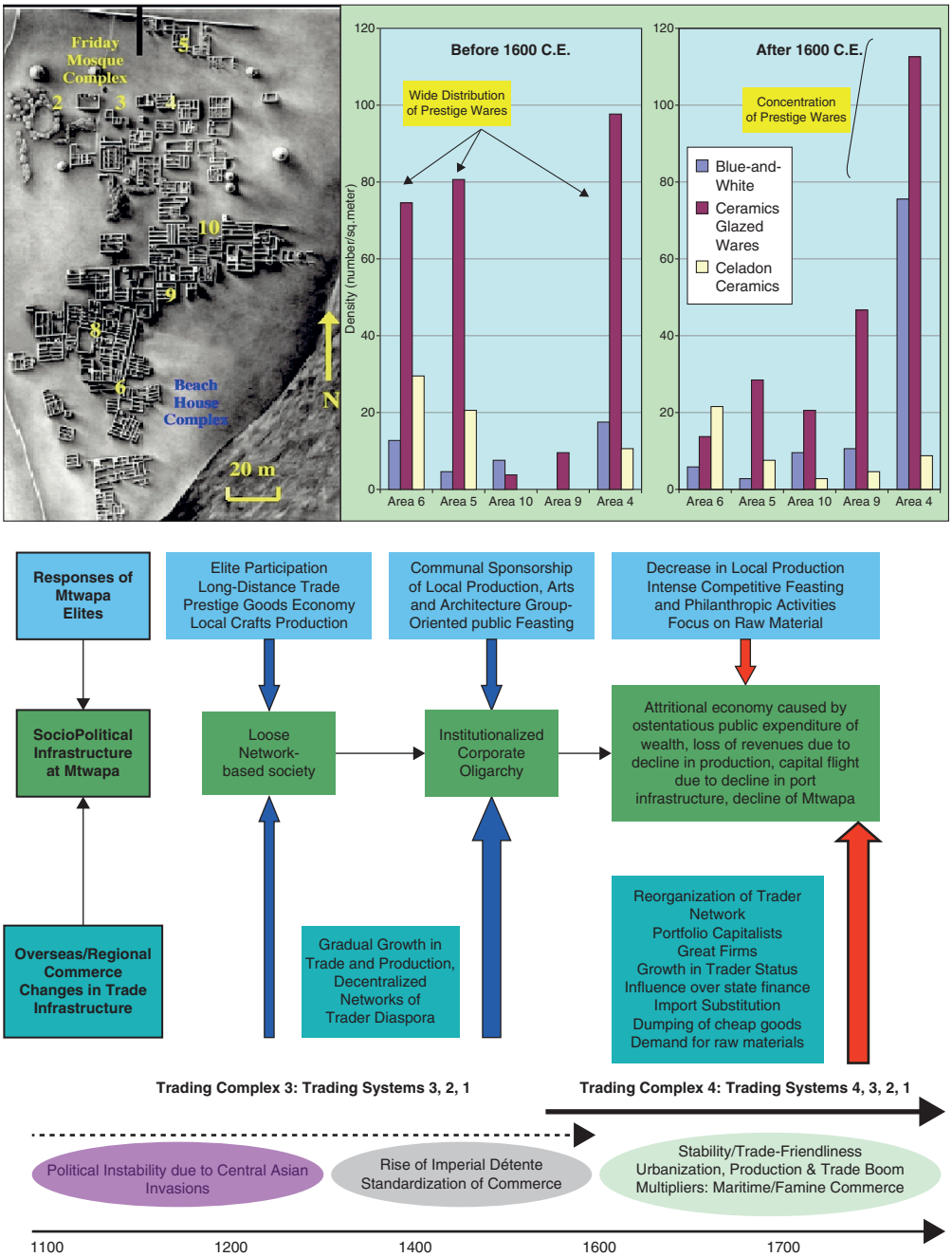
As seen in Figures 11.9 and 11.10, the results show unequivocally that Mtwapa, strongly engaged with the trading network in the late first and most





Provenience Analysis of Monochrome Glazed Wares Using LA-ICP-MS found in Mtwapa Made in South Asia (Khambat) or Southwest Asia/North Africa

11.9. Predatory commerce in the Gilded Age (1500–1700 AD): (a) ivory and slavery and (b) South Asians capture glazed ware market.



11.10. Post-1600 AD decline of manufacturing (area 5 [iron] and area 6 [cloth]) and emergence of new elites (areas 9 and 10) at Mtwapa, Kenya.

of the second millennium AD, witnessed a surge of wealth seen in prestige goods after 1600 AD but also saw a decline in local manufacturing in areas 5 and 6. The rise of new elite areas unassociated with any production of local goods (areas 9 and 10) was paralleled by a significant increase in conspicuous consumption in area 4, the Friday mosque, which may be interpreted as local elites competing to establish their status with local people and foreign traders. In the seventeenth and eighteenth centuries, a combination of (1) the elite focus on raw materials, namely ivory, animal skins, gold, and slaves; (2) disinvestment in local production; (3) the documented flooding of African markets with cheap Asian goods; and (4) the competitive status displays at the Friday mosque led to an attritional decline in the political and social economy of Mtwapa. The predatory commerce here resulted in state capture and then the loss of capital as merchants and then political elites rapidly abandoned the city for a more efficient Mombasa after 1700 AD. The resulting lack of revenues for utilitarian services for the city led to the subsequent abandonment by nonelites over the next century.

CONCLUSION

The central questions asked of the authors in this volume include the discussion of the negotiation of trader autonomy in relation to local elites and political power; trade as a prerequisite for stable political structures or vice versa; and the relation between trade and predatory economies and other trade-unfriendly conditions including war and other anthropogenic and natural disasters. In this chapter, the TSM has been presented in the hopes of addressing, if not directly answering, some or all of these questions. This model is a way to conceptualize transformations in trading behaviors and their emergent outcomes in the forms of shifts in trading systems and complexes. Derived from ethnographic research and observations of traders under the maxim oft-quoted by many of my own field-research consultants: "trading is trading is trading is trading, now and then, here or there," the model describes the mechanisms underlying not only how trade was conducted, but also the similarities and differences between contemporary and past trade and commerce.

Despite fruitful beginnings in the Early Common Era (300 BCE–300 AD) and the late first/early second millennium AD (800–1300 AD), true global integration of polities and economies evidenced by price convergence, market reactions/elasticity, labor relations, raw material acquisition, and political subservience to commercial interest, only happened after 1600 AD. To Karl Polanyi's great transformation and Kenneth Pomeranz's great divergence, I would add another great: "The great convergence" of tastes, preferences, and activities that would shape the lives of a global bourgeois, middle and upper consumer classes, who would shape their world in turn. Today, the clusters of

decaying buildings and the abandoned cities dotting the Indian Ocean littoral stand in mute testimony to the trading world that did encompass the Afro-Eurasian landmass between 500 BCE and 1500 AD – the Swan Song of a world that would be transformed irreparably and forever over the following centuries.

NOTES

1 Curiously, this term is phonetically and etymologically similar to another term *veishya*: prostitute, perhaps indicating the disembedded/nonpersonalized aspects of commercial transactions.

2 *Vanijya sreshti*, meaning "great in commerce," has survived to this day, with the title *Seth/Sethji* used by and for South Asian merchants as an honorific.

3 Some emerging evidence suggests the westward spread of Buddhism even to Turkey and Southern Europe (Seldeslachts 2007).

4 Futures trading is mentioned as a form of business circa fourth century AD in Aristotle's *Politics* (Jowett 1908: 453). It was developed as a financial instrument in various areas in Asia and Europe between the ninth and thirteenth centuries AD (Bell, Brooks, and Dryburgh 2007) and was fully institutionalized between the sixteenth and eighteenth centuries AD in South Asia and East Asia (Bayly 1988; Schaede 1989).

5 Timur conquered and imprisoned the Ottoman Sultan Bayazid in 1402 and then reinstated his son Muhammad I as his vassal. The Mughals, who considered themselves Timur's descendants, claimed a similar relationship with the Ottoman, based on Timur's actions. Needless to say, the Ottoman did not share this vision of Mughal supremacy.

6 A similar process would take place in the Dutch Republic and England in the mid-eighteenth to nineteenth centuries, or two centuries after its institutionalization in the Indian Ocean world.

7 In the contemporary era, this ideology would be enshrined in the statement, "What's good for General Motors is good for the country" that, although initially a misquote, became the standard line to indicate ascendancy and dominance of corporate/commercial interests over the political and social considerations of nation-states. The original speaker, Charles E. Wilson (ex-CEO of General Motors and the US Secretary of Defense [1953–1957]), said "[W]hat was good for [the US] was good for General Motors and vice versa." Later, he, along with popular culture, embraced the misquoted line (Hyde 2008).

8 A brief aside about structural holes and redundancy with respect to network theory: As developed by Ronald Burt (1992, 2006), an individual or a group emerges as powerful and indispensable when their links provide the bridges between networks that would otherwise be unconnected. Redundancy is provided when a group, as opposed to individuals, bridges these gaps or the structural holes in the network, as there are multiple nodes that can provide the same service.

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TWELVE

TRADE AND CIVILIZATION IN MEDIEVAL EAST AFRICA: SOCIOECONOMIC NETWORKS

Chapurukha M. Kusimba

INTRODUCTION

Our knowledge of the role of ancient societies has advanced exponentially in the past two decades due to renewed anthropological interest and methodological advances in identifying and characterizing ancient civilization (Blanton and Fargher 2008; Flannery and Marcus 2012; Kristiansen and Larsson 2005). The importance of travel, trade, and sustained long-distance interactions feature prominently in the rise and sustenance of early societies as they do in the present day (e.g., Bowden and Seabrooke 2006; Casson 1994; Chaudhuri 1985; Helms 1988; Oka and Kusimba 2008a; Polanyi 1957). Systematic, problem-oriented research on the Kenyan coast and its hinterland has enabled us to understand the ecological, cultural, and economic milieu in which complex chiefdom and urban polities arose in Eastern and Southern Africa in response to global long-distance exchange in the Indian Ocean (Kusimba 2008; LaViolette and Fleisher 2005; Mitchell 2005; Pwiti 2005; Sinclair, Ekblom, and Wood 2012). Ancient East Africa communities organized themselves along ethnic lines but were linked to each other through numerous networks of interactions at various scales (Herlehy 1984; Kusimba and Kusimba 2005; Kusimba, Kusimba, and Dussubieux 2013). To what extent are these interaction spheres viable for understanding the rise and sustenance of cosmopolitan urban polities on the East African coast?



12.1. The medieval palace of Gede (ca. 1350 CE).

Swahili civilization that thrived on the eastern coast of Africa between 800 and 1500 CE was closely linked to the development of market-centered towns, which received shipborne goods from the far corners of the Asian and Mediterranean world and send forth the produce of Africa to Eurasia (Fleisher 2010; LaViolette 2013; Mitchell 2005; Pearson 1998, 2003; Pollard, Fleisher, and Wynne-Jones 2012; Sinclair and Håkansson 2003). Up to the 1980s, the coast of East Africa was strewn with the remnants of this ancient civilization: the ruins of once flourishing towns with their elite mansions and mosques built in coral rag (Figure 12.1). The overall cultural dimensions of the citizens of the coast at the time of British and German colonization was nominally Islamic, a consequence of nearly seven centuries of economic contact with and colonization from southern Arabia, western India, and Portugal (Hourani 1995; Pearson 1988, 2003). The residents also interacted directly and indirectly with communities as far as Indonesia and China. Yet, despite this welter of external contacts, it was a culture that remained essentially African in nature and scope (Allen 1993; Caplan 1998; Fleisher 2003; Horton 1996; Kusimba 1999a; Matthew 1956; Middleton 2001, 2004).

Archaeological and anthropological research specifically aimed at understanding ancient transcontinental communication between Africa and Eurasia remains insufficiently developed. Although recent scholarship has unveiled early Indian Ocean maritime connections, the role of Africa and Africans is

often omitted from the conversation (Abu-Lughod 1989; Chaudhuri 1985). Thankfully, this is beginning to change (e.g., Hawley 2008; Pearson 1998, 2003). Africa and Asia have been linked economically and technologically for several millennia. Many of the food crops that are now staple foods in much of sub-Saharan Africa were first experimented with and domesticated in Asia. Some of the African domesticates including sorghum, millet, and coffee are widely consumed by contemporary Asians as staples (Possehl 1986; see Rowland, this volume).

Ancient connections between Africa and Asia, including China are exhibited in the numerous archaeological remains that have been recovered at many sites across the continent. Artifacts including Indo-Pacific beads, glass, glazed pottery, and jewelry from the Middle East, and Chinese stoneware and porcelain, among others have been recovered at nearly all medium to large settlements along the Eastern and Southern African subcontinent from the Tang Dynasty to the present (Oka 2008; Robertshaw et al. 2003; Sarjeant 2000; Sinclair et al. 2012; Walz 2010). This non-African materiality bears witness to the global connections, contributions, and complexity of Africa's past and systematically dismantles the long-held narrative that Africa was isolated from Eurasia and, with the exception of North Africa, contributed precious little to global civilization (e.g., Lughod 2008: 188).

GLOBAL CONNECTIONS: AFRICA, ASIA, AND MEDITERRANEAN EUROPE

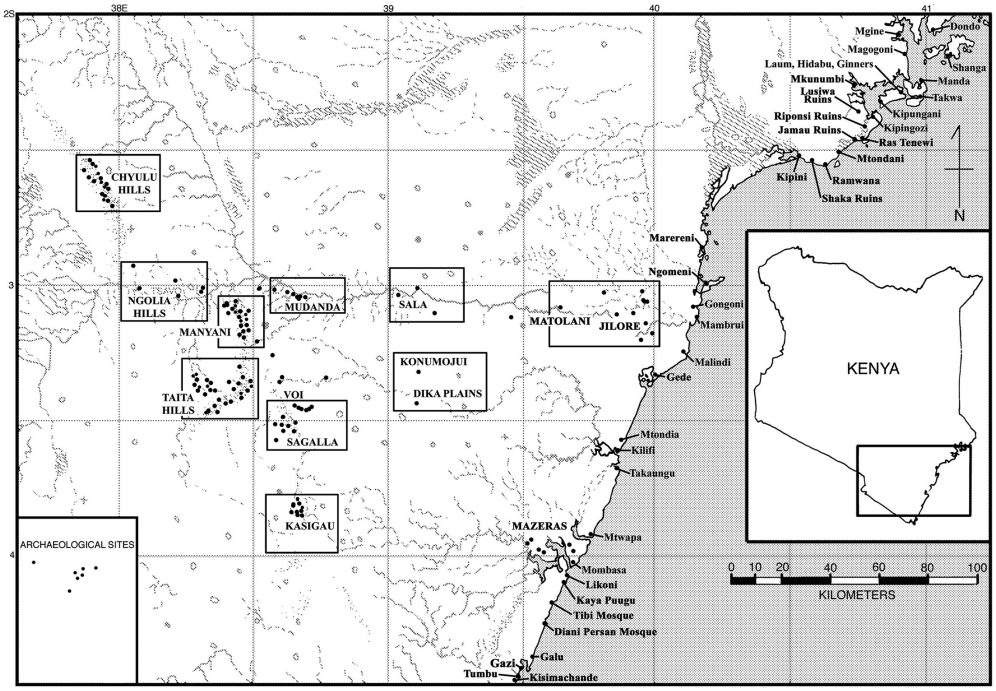
Trade played an important role in the development of cultures throughout ancient times (Oka and Kusimba 2008a). Trade linked diverse peoples and communities in a network on interactions that had a huge impact in advancement of the daily life. Archaeologists and historians have documented evidence of biological, cultural, linguistic, commercial, and technical communication between East Africa and the Middle East beginning from the early first millennium CE (e.g., Sedov 1998; Steensgard 1987). The *Periplus of the Erythrean Sea*, a third-century mariner's guide presumably written in Alexandria, mentions that iron lances, hatchets, daggers, and awls made at Muza, east of Aden constituted trade items consigned for African markets (Casson 1989). Trade items from the East African coast consigned for foreign markets in India, the Middle East, and China included marine products – tortoise shells and ambergris; animal products – ivory, rhinoceros horns, and cat skins; and vegetable products – mangrove poles, wood, and timber. Turtle shell and ambergris were in high demand in India and China (Horton 1996: 414). Ivory, rhinoceros horns, and leopard skins were exported to India, China, and Persian Gulf. There was a need for timber for building and aromatic products in the Persian Gulf until relatively recently. Demand for African timber in the Gulf was high enough to

be reported by Ibn Hawqal in about 960 CE, who wrote that houses in Siraf were built of wood from the country of the Zinjs (Freeman-Grenville 1962; Martin and Martin 1978).

Textiles including silk and cotton were spurn in Mogadishu, Pate, Zanzibar, Kilwa, Mahilaka, and other major towns and their products widely traded in Eastern Africa reaching as far as Egypt. Upon their visit to Pate, the Portuguese were sufficiently impressed by the high-quality silk manufactured there (Freeman-Grenville 1962). Mining and working of iron was an important industrial activity at Malindi and other Swahili towns. The superior quality of iron products made in East Africa was impressive enough to be added on the list of African exports to India by Indian merchants who regularly visited the coast with the aid of annual monsoon winds (Horton 1996: 418). Al Masudi who visited East Africa in 912 CE left one of the most cogent descriptions of the iron industry on the coast in his *The Meadows of Gold and the Mines of Gems*. Commenting on the ongoing transoceanic trade between East Africa and Asia, he wrote:

> The Zanj exported gold, silver, iron, ivory, tortoise shell, and slaves. Iron was probably the source of the largest profits. Indian merchants came to buy iron and took it back to their own country where they resold it to the manufactures of iron weapons. The Zanj of Malindi owned and worked iron mines, as did other towns, but Malindi must have been the most important. East African iron was much valued in India, partly because there was no lack of supply and partly because it was of good quality yet easy to fashion and they became masters of the skill of working. The Indians were said to make better swords than anyone else, and weapons made of the iron of Zanj were used throughout the Middle East and countries of the Indian Ocean. (Freeman-Grenville 1962: 20; Shinnie 1965: 107)

As elsewhere, trade was crucial in the development of complex African chiefdoms, states, and urban polities that emerged during the latter half of the first millennium of our era to the sixteenth century CE. Along the East African coast, from Somalia to Mozambique, autonomous urban polities emerged (Figure 12.2). The residents, who were drawn largely from the region, pursued diverse but complementary vocations, which included hunting, agriculture, fishing, and trading. Available records indicate connections with countries to the north extending in Eurasia. The locals' engagement in local, regional, and transoceanic trade served as the main catalyst for building communal and personal wealth that led to a steady transformation of the villages and hamlets into small towns, cities, and ultimately to city-states that boasted a large and diverse citizenry (Tables 12.1–12.2). As they transformed into states, the emergent economic and political elite vied for managerial control of sources of wealth, which was sustained through forging and maintaining relationships



12.2. Map of the East African Coast showing known archaeological sites.

and alliances with transoceanic and hinterland partners (Kusimba and Kusimba 2005; Kusimba, Kusimba, and Wright 2005; Middleton 2001, 2004; Mitchell 2005; Pwiti 2005). The cities' prosperity was affirmed and fostered by social and political stability across the region (see Oka, this volume). Evidence for relational and political stabilities is found in bonds, pacts, and treaties, usually called blood brotherhoods in East Africa (Herlehy 1984; Kusimba and Kusimba 2005). Within the cities, alliances sanctified through opportunistic intermarriages among the political and economic elite, who included foreign residents, were the norm (Middleton 1992, 2004; Tolmacheva 1990). These relationships bound the cities' residents to their neighbors in the rural hinterland and strangers across the sea were the kernels upon which African connections, contributions, and complexity depended. Continued regional and intercontinental prosperity depended upon forging and maintaining commercial and cultural dialogue amongst interacting partners (Allen 1993; Middleton 1992; Oka and Kusimba 2008a; Udovitch 1970).

By the beginning of the second millennium CE, Eastern and Southern Africa, indeed the entire African continent, had become a regular partner in the millennial-old long-distance exchanges that reached as far as the Arabian Peninsula, India, Sri Lanka, and China (Campbell 2008; Mitchell 2005; Pearson 2003; Wilkinson 2003). By the thirteenth century, a local African urban elite had emerged that financed, managed, and controlled local, regional, and transoceanic

TABLE 12.1 *The Relation of Subsistence, Community, and Settlement Pattern to House Plan on the East African Coast*

Cultural Period	Predominant Domestic House Ground Plans	Community Settlement Patterns	Subsistence Patterns	Community Size and Structure
Period I [BC 100–AD 300]	Circular	Free and central-based wandering, semipermanent sedentary to simple nuclear centered	Hunting, gathering, fishing, gardening, barter	Seasonal camps and semi sedentary hamlets of single-family groups and small bands
Period II [AD 300–1000	Circular, globular, cylindrical	Increasing restricted wandering and semipermanent sedentism to simple nuclear centered	Hunting, fishing, gathering, agriculture production, barter, local and some interregional trade	Seasonal camps, small scattered sedentary villages of closely related kin
Period III [1000–1500]	Globular, cylindrical, rectangular	Restricted wandering, semipermanent sedentism to long and continued sedentism	Hunting, fishing, gathering, intensification of agriculture production, interregional, and international trade	Seasonal camps, semisedentary camps, large villages, small to medium-sized towns, and cities with diverse populations
Period IV [1500–1950]	Cylindrical, rectangular	Restricted wandering, semipermanent sedentism to long and continued sedentism	Hunting, fishing, gathering, intensification of agriculture production, interregional, and international trade	Seasonal camps, semisedentary camps, small to large villages, towns, and cities with diverse populations

TABLE 12.2 *Classification of Coastal Sites in Kenya*

Class	Size [Hectares]	Features Present	Settlement Type	Number of Sites	Examples
5	1.0	0–1 mosques, < 5 tombs	Hamlet	34	Mgangani, Kinuni, Kongo, Munje, Diani, Tiwi
4	< 2.5	1–2 mosques, 5–10 tombs, 1–5 coral buildings	Village	39	Shee Umuro, Mwana Mchama, Kilepwa, Mnarani, Shirazi, Rubu, Tumbe, Galu
3	2.5–5.0	1–2 mosques, > 10 standing coral houses and town walls, > 2 tombs	Small Town	19	Koyama, Ngumi, Chula, Ishakani, Kiunga, Omwe, Shee Jafari, Kitoka, Kilepwa, Jumba la Mtwana, Dondo
2	5.0–15.0	2 mosques, > 2 cemeteries, 50–100 coral houses, enclosed stone houses and open mud and coral houses	Towns	9	Merka, Munghia, BurGao, Siyu, Shanga, Manda, Mwana, Mtwapa and Vumba Kuu
1	> 15	3+ mosques, 3+ cemeteries, > 100 standing coral houses, existence of wards	Cities	8	Mogadishu, Barawa Malindi, Lamu, Mombasa, Pate, Ungwana, Gede

trade and communications along the East African seaboard. Innovations in ironworking aided agricultural intensification and specialization in hunting, fishing, and herding. These changes improved the quality of life and precipitated population growth and economic prosperity for some 200 years.

In the late fifteenth century, however, Europe entered into the equation seeking to control and benefit from the millennial-old trade in the Indian Ocean (Acemoglu and Robinson 2012; Pearson 2003). The rivalry for control of Indian Ocean commerce was economically crippling for Africa and Asia and beneficial for Europe (Fergusson 2012). The consequence of competition for control of transoceanic trade was warfare, which favored Europeans due to their superior naval and military power. The post-sixteenth century ushered in an era of decline and dependence while paving the way for Europe's colonization of Asia in the seventeenth century and Africa in the nineteenth century (Blaut 1993; Frank 1998; Oka, Kusimba, and Gogte 2009; Rodney 1974). Economic decline and the ceding of sociopolitical power to European nations was a regionwide phenomenon that affected Asian and African political economies. Legitimate and mutualistic regional and transoceanic trade

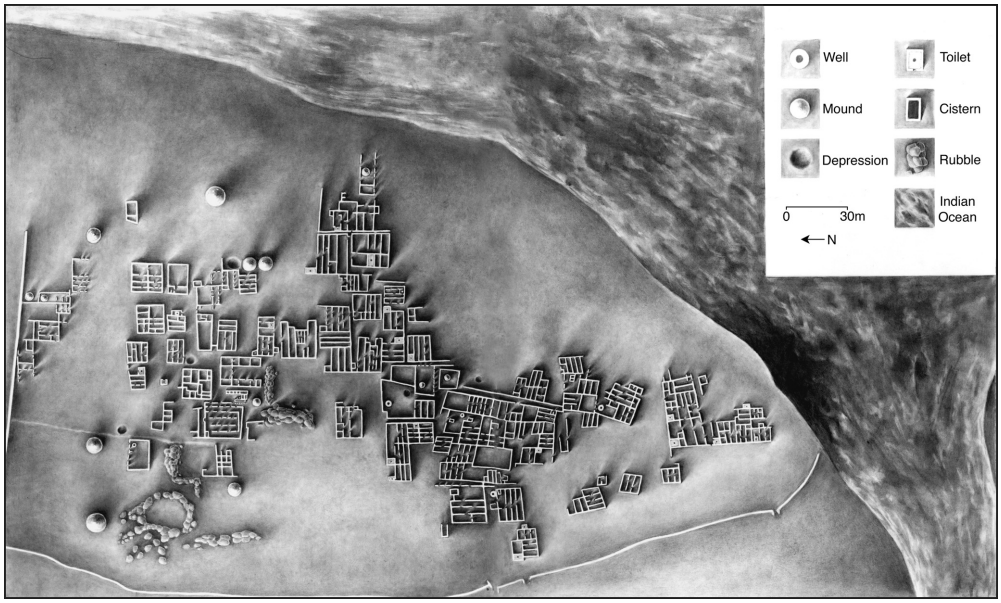
gave way to the now-infamous ivory and slave caravans, financed by overseas merchant groups. Coastal slave-raiding expeditions weakened long-standing alliances among peoples, cut off traditions of herding and farming, and decimated populations. Today, the ruined walled towns of the east African coast and in the African interior suggest the magnificence of Africa's achievements and contributions to world history.

THE ISSUES: SOCIAL AND ECONOMIC NETWORKS AND THE ORIGINS OF CIVILIZATION

Currently, one of the central theoretical debates in the later prehistory of Eastern and Southern Africa concerns the origins of precolonial urbanism and the nature of urban-hinterland relationships (Chami 1998; Fleisher 2010; Kusimba 2008; LaViolette 2013; LaViolette and Fleisher 2005; Sinclair 2010; Sinclair and Håkansson 2000). Mabogunje (1962: 3–4) first pointed out in his classic study of Yoruba urbanism that cities do not exist on their own, but are tied to their hinterlands. He demonstrated that Yoruba cities performed specialized functions in the context of a largely agricultural and undifferentiated hinterland. Nevertheless, cities are often of markedly different character from their hinterlands, including greater ethnic diversity; a higher degree of social complexity and status differentiation; and more diverse economic and subsistence activities, contributing to their "cosmopolitan" character (LaViolette 2008, 2013; Marcus and Sabloff 2008; Sinclair et al. 2010; Trigger 2003). Cities have almost always exerted economic, social, or ideological power with regard to their hinterlands, yet this relationship was also faced by certain constraints in productivity, communication, and transport that limited city-hinterland interactions that remained remarkably consistent across the ancient world (see Earle, this volume).

In spite of some basic constraints on ancient urbanism, there is in fact great variation in archaeologists' approaches to understanding the origin of ancient cities (Sinclair 2010). Usually, the birth of a city emerges out of changes in settlement patterns and landscape within a particular region. Along the Swahili coast, and in Africa in general, there has been more of a focus on the towns because of logistical difficulties, a paucity of researchers, and an external orientation among many colonial and mid-twentieth-century scholars in which Indian Ocean trade and its signatures have often been privileged (Killick 2009).

The Swahili port city of Mtwapa, where I have worked for nearly three decades, exhibits three scales of interaction that were crucial for its rise and sustenance as an urban polity (Figure 12.3). First is Mtwapa's relationship with nearby fishing and farming villages along the mouth of Mtwapa Creek. Second is Mtwapa's partnership with communities inland from the coast in the Tsavo region. Third are the interactions that the governors and citizens of Mtwapa forged with international trading partners via Indian Ocean networks. At each

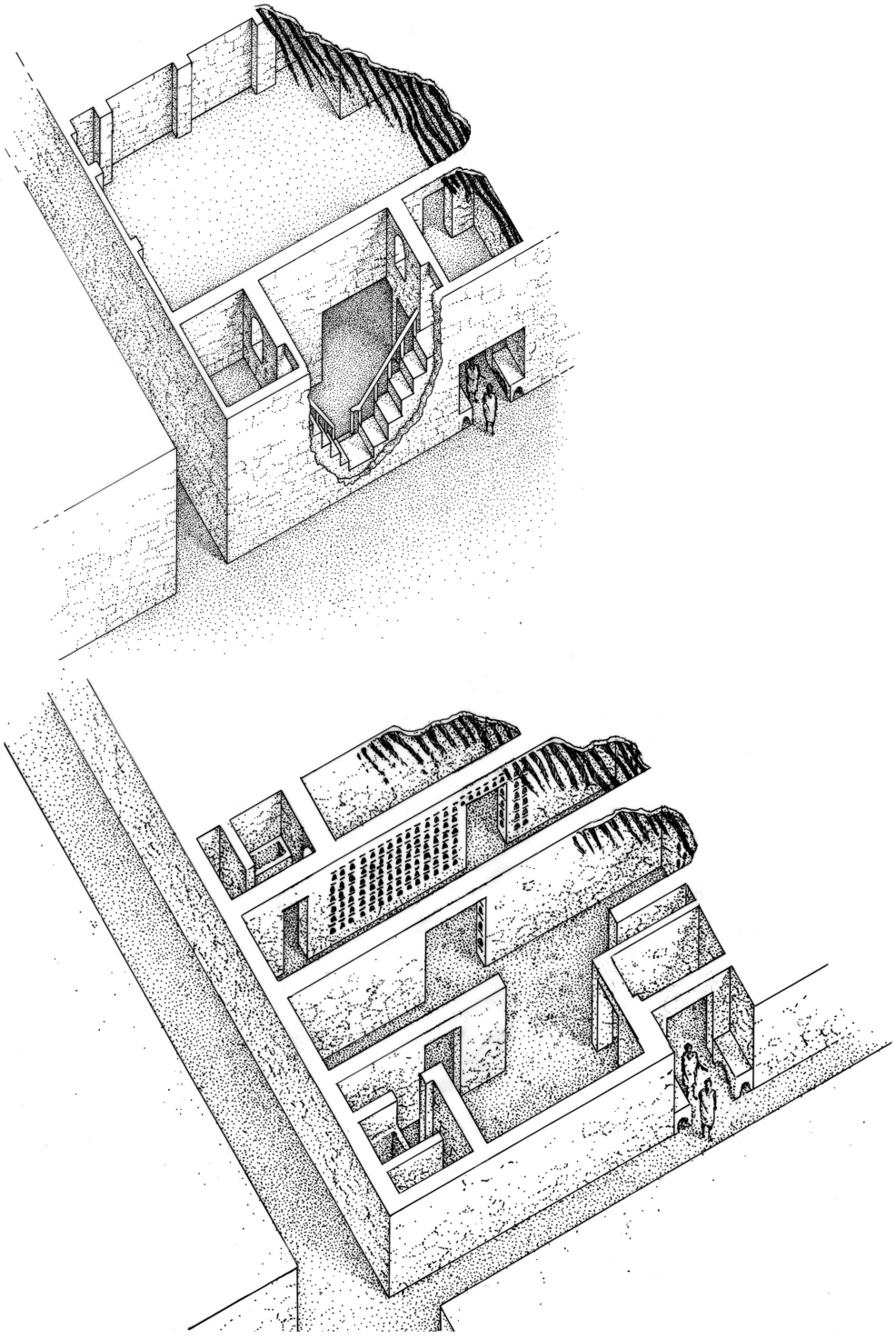


12.3. Plan of the port city of Mtwapa (ca. 1100–1750 CE).

of these three scales, material evidence connects the urban center of Mtwapa with economic and social interactions that give clues as to the evolution, character, and constellation of Swahili civilization. However, it is increasingly clear, based on both qualitative and quantitative distinctions in urban settings, that inequality in access to crucial coastal resources, such as human labor, arable land, fishing areas, and mangrove forests, was an important factor underlining the emergence of Swahili cities (Kusimba and Kusimba 2009; Kusimba and Oka 2009). As Indian Ocean trade networks overlay these local inequalities, regional and international trade goods were incorporated into elite-controlled social and economic networks. These three scales or levels do not have a necessary chronological relationship, and each of them could be paramount in any particular region at any particular time. The question of the relative importance and the nature of interactions on these three scales is an empirical one.

SCALE ONE: MTWAPA AND THE VILLAGES ALONG MTWAPA CREEK

The first scale of analysis of a Swahili town discussed here is that of a large town and the smaller communities, often villages, in its immediate hinterland. Large towns were often located at the mouths of rivers or near estuaries, inlets, and offshore islands. Located at the mouth of a navigable creek, the port of Mtwapa originally covered about nine hectares out of which about four still contain standing architecture, including one main congregation mosque, sixty-four houses, some twenty mounds, and thirteen wells (Figure 12.4). At



12.4. Schematic plan of Swahili elite house.

its height, Mtwapa's estimated population reached 5,000 (Kusimba 1993). As a port, Mtwapa's role in the regional and overseas trade is evident in the nature and distribution of artifacts recovered in excavations. The town's location at a deep natural harbor with excellent careening facilities placed it in a most favorable position to engage in interregional social and economic networks.

After nearly 4,000 years of occupation, Mtwapa, like other Swahili settlements, was abandoned ca. 1750 CE, a victim of the effects of the Little Ice Age and the decline in international maritime trade (Kusimba et al. 2013). Mtwapa's location on a navigable creek offered some advantages of direct interaction between coastal and hinterland trade and, where appropriate, direct trade between foreign merchants and hinterland peoples (Kusimba 1999b). Hinterland peoples were also likely to exercise some power in the affairs of the town because they could circumvent other towns' rules, which tended to restrict nonelite access to foreign traders and merchants (Nicholls 1971; Willis 1993). In this sense, Mtwapa's location served to reduce local elite intermediaries' dominance and likely made it a place where trader-friendly rules were exercised (e.g., Gray 1957: 61; Sheriff 1971: 136). Minimalist monopoly over access to foreign and hinterland traders provided opportunities for forging regional and interregional networks that were unavailable to hinterland traders on more isolated island towns, like Mombasa, Lamu, Pemba, among others where local elite monopolized access and trade relationships with foreign merchants and served as primary middlemen.

The stone house has had a long history in Swahili culture as a symbol of elite power and social distance (Allen 1976; Donley-Reid 1984, 1990; Ghaidan 1976). Three clusters of complex houses were discerned. All complex structures were well fortified with a perimeter wall enclosure. Compound houses were built east of the town. Single houses were mostly found south and southwest of the main congregation mosque.

A perimeter wall surrounded the town's core. However, as the town's population increased, the community built outside the wall. At its height, Mtwapa had two distinct resident communities – one residing within its walls and the other outside. Both within the town wall and outside of it, differences in house size, elaboration, and construction materials show a community characterized by a broad range of social class, wealth, and likely social status. Thus, like other contemporary coastal settlements, Mtwapa's resident population was economically diverse.

Neighborhoods differentiated by vocation and social classes are clearly visible in the type, quality, and style of construction. For example, access to critical wealth-creating resources such as fertile farmland, fishing grounds, mangrove forests, and exotic trade networks became increasingly restrictive. Differences in wealth were displayed in the type of material and skill used in house construction and in house size, which implied longer life and permanence. For

example, the door frames of multiroom stone houses were of porites coral. All multiroom houses had flat coral tile roofs, and all included toilets and/or bathrooms and wells. All multiroom houses had comparatively large courtyards. In contrast, single-unit stone houses had no wells and the quality of their finishing was less well executed when compared to complex structures. Excavations at Locality 5, a single-unit stone house, showed that it originally had a mud-on-wooden-frame construction but was significantly improved upon relative to household prosperity. Mud was used in some houses instead of lime as mortar. Many single-unit houses appear to have had grass or coconut thatch roofs. None had a coral ceiling.

The ceramic assemblage from Mtwapa town shows the evolution of class distinctions and changes in the tastes and habits of this society. First, 94 percent of all the ceramics were locally produced, but there is a transition from small eating bowls during the later period to shallow dishes, cooking pots, and jars. The diversity of style and form may also be indicative of the transformations tastes, eating habits, and even family sizes (Fleisher and Wynne-Jones 2011). Even when nonlocal wares are considered, however, there is great variation from one excavated locality to the next in terms of the types of nonlocal ceramics represented and their proportions in assemblages (Oka 2008). Nonlocal pottery and glassware were consistently associated with only a few localities at complex and compound houses almost exclusively; moreover, these associations appear in the earliest levels of the excavations dated to the fourteenth century CE, and remain consistent throughout the sequence until the upper levels dated to the eighteenth century CE. Rahul Oka's (2008) study of trade ceramics, including Chinese and Islamic pottery and porcelain, at Mtwapa emphasizes the great disparities in the distribution of power and wealth within the town. The wealthy, including both political and economic elite, resided in better-constructed and secured quarters and enjoyed unequal access to basic resources like water. They also had exclusive rights to being buried near the town's main congregational mosque – the Friday Mosque.

Around Mtwapa – The Village of Kizingitini

Full-coverage survey beginning at the mouth of Mtwapa Creek and extending along both sides about 20 km recovered a total of twenty-one Late Iron Age sites identified on the basis of pottery (Kusimba et al. 2013). The sites were the remains of a large settlement that was located along the creek. These dispersed villages and homesteads help elucidate the nature of stone town-country town relationships (Fleisher 2010; Pawlowicz 2012). Surveys and excavations by Mutoro (1987, 1998) in the immediate hinterland of Mombasa and Mtwapa and by Abungu (1990, 1998) at Wenje along the Tana River in the hinterland of Ungwana suggested trade connections that linked the coastal communities

TABLE 12.3 *Mtwapa Radiocarbon Dates*

Sample	Locale	Level [cm]	Dates	Low	Mid	High
4	3	0–10	280 ± 70 BP	1661CE	1731 CE	1801 CE
9	5	40–60	340 ± 70 BP	1601CE	1671 CE	1741 CE
1	2	80–90	340 ± 70 BP	1601CE	1671 CE	1741 CE
6	4	20–40	350 ± 70 BP	1591CE	1661 CE	1731 CE
7	4	40–60	360 ± 70 BP	1581CE	1651 CE	1721 CE
11	5	80–100	360 ± 70 BP	1581CE	1651 CE	1721 CE
10	5	60–80	370 ± 70 BP	1571CE	1641 CE	1711 CE
2	2	120–130	480 ± 70 BP	1461CE	1531 CE	1601 CE
13	5	120–140	480 ± 70 BP	1461 CE	1531 CE	1601 CE
14	5	140–160	480 ± 70 BP	1461BCE	1531 CE	1601 CE
8	4	80–100	480 ± 70 BP	1461CE	1531 CE	1601 CE
12	5	100–120	490 ± 70 BP	1451CE	1521 CE	1591 CE
3	2	130–140	500 ± 70 BP	1441CE	1511 CE	1581 CE
5	3	100–120	510 ± 70 BP	1431CE	1501	1571 CE
15	5	160–180	610 ± 70 BP	1331-	1401CE	
16	5	180–200	610 ± 70 BP	1331–1471CE	1401CE	1451 CE
17	5	220–250	630 ± 70 BP	1311-	1381CE	1451 CE
18	4C	260–280	650 ± 70BP	1428CE	1358CE	1288BCE
19	4D	280–300	2850 ± 70BP	912BCE	842BCE	772BCE
20	4D	300–320	3740 ± 70BP	1802BCE	1732BCE	1622BCE

to their hinterland neighbors. Collectively, Jonathan Walz's surveys in the Usambara region (Walz 2010), ongoing research by Matthew Pawlowicz (2012) in the Mikindani area, and Richard Helm's work (Helm et al. 2012), extend Henry Mutoro's earlier surveys on the Kenya coastal hinterland. Intimately connected urban settlements along the coast were the favored locales for early settlements. In fact, our survey indicates significant differences in settlement patterns and in ceramic technology that show a distinctive village lifeway persisted in the shadow of the stone town (Kusimba et al. 2013). Like Mutoro and Abungu's work, the present survey yielded no significant evidence of social stratification, which is often associated with large coastal port towns, like Mtwapa, Ungwana, or Takwa (Wilson 1980). Instead, the recovered material remains, including postholes, pottery dominated by cooking pots and jars pointed more or less to an agrarian and fisher folk lifestyle (e.g., Haaland 2007). Salt seepage may have contributed to the lack of faunal remains. Surface and excavated materials recovered at these sites included abundant pottery, all of it local. Seven radiocarbon dates confirmed that the settlement is contemporaneous to Mtwapa and Jumba la Mtwana (Table 12.3).

Decorative motifs on pottery found on three out of six LIA sites along Mtwapa Creek conform to the Tana ware nomenclature (Fleisher and Wynne-Jones 2011). The majority of vessels were low-fired water jars, water pots, and cooking pots. Although the Creek and Mtwapa town communities

TABLE 12.4 *Kizingitini Radiocarbon Dates*

Sample	Locale	Level [cm]	Uncal. Dates	Low	Mid	High
KC17	1	20–40	310 ± 70 BP	1494 CE	1568 CE	1642 CE
KC33	3	40–60	410 ± 70 BP	1443 CE	1521 CE	1599 CE
KC18	1	40–60	420 ± 70 BP	1437 CE	1516 CE	1595 CE
KC5	1	60–70	420 ± 70 BP	1437 CE	1516 CE	1595 CE
KC36	3	100–110	430 ± 70 BP	1430 CE	1511 CE	1592 CE
KC35	3	70–90	440 ± 70 BP	1423 CE	1504 CE	1585 CE
KC29	2	160–180	530 ± 70 BP	1323 CE	1376 CE	1429 CE
KC30	2	220–240	610 ± 70 BP	1300 CE	1346 CE	1392 CE
KC41	3	190–210	790 ± 70 BP	1155 CE	1209 CE	1263 CE

were contemporaneous and almost certainly interacted on a regular basis, the pottery excavated at the Creek sites was distinguishable from Mtwapa pottery by decorative motifs, form, and style. The Creek pottery exhibited a much smaller repertoire of forms and styles, and its finishing and skill in firing was qualitatively inferior. These differences can be attributed not to ethnicity but rather to differences in the social contexts of manufacture. The diverse Mtwapa pottery's relative sophistication suggests part to full-time specialization; by contrast, Creek pottery suggests household manufacture primarily for home use.

The Mtwapa-Kizingitini pattern can shed light on the process of urbanization that differentiated the landscape of Mtwapa Creek as the stone town emerged (see Table 12.4). Stone towns and their hinterlands have always been connected; for example, Allen (1993) proposed that townspeople shifted residence to their countryside farms for planting or harvesting. Initially at least, the interaction of these towns and their local hamlets would have been based on kin groups and alliances. Nicholls (1971) and Herlehy (1984) describe alliances, patron-client relationships, and fictive kinship that fostered exchanges of goods and labor between small and large settlements. However, it seems that in time the urbanites' broader networks increasingly differentiated them from their rural kin. These differences manifested themselves in terms of taste, including clothing, aesthetics, religion, mortuary practices, and diet.

SCALE TWO: THE INTERIOR AND THE COASTAL INTERACTION SPHERES

The second scale of analysis is a regional one; it could encompass the relationships of towns and settlements with each other along the coast, and it could also encompass relationships with that most economically crucially important trading partner: the East African interior.

Fieldwork was initiated in the Tsavo region 150 km east of the Kenyan coast in 1997. Tsavo was an ethnically and economically diverse area well into

the early twentieth century. The historic peoples of the Tsavo mosaic include the Waata, understood historically to be peripatetic foragers (Kenya Land Commission 1933: 309); the Taita agriculturalists of the terraced uplands of the Taita Hills (Kenya Land Commission 1933: 319); the Akamba agropastoralists; the forager/herder Wambisha (Kimambo 1970: 90) and the Oromo pastoralists (Gregory 1968: 386).

Historically, Tsavo groups pursued different economic strategies in different environs of the ecological mosaic. They maintained their identities in spite of a high degree of trade and movement of people across community boundaries, which have been confirmed through archaeology, ethnohistory, and linguistics (Ehret and Nurse 1981; Prins 1961). Taita and Oromo pastoralist groups were organized into patrilineal corporate groups. However, in these societies, significant authority was held by elder males who sought to accumulate cattle and land, and control their distribution. Consequently, intergroup conflict over wealth-building resources, such as cattle, coexisted with alliances for the exchange of goods, information, and ritual power (Bravman 1998; Kusimba and Kusimba 2005; Merritt 1975). Some forms of technical and practical knowledge, such as hunting techniques, poison making, and animal tracking were so prized that blood brotherhoods and secret societies controlled the spread of this sacred information – critical oral information for a better understanding of how alliance-building and information exchange occurred (von Hohnel 1968: 267).

Macropatterns or Site Clusters in Tsavo

During the surveys, 250 new archaeological sites were located. These surveys identified six macropatterns or regional clusters which are summarized in Table 12.5.

Mortuary Sites (Cairns and Skull Sites)

Graves, cemeteries, cairns, and skull internment sites occur widely in the Tsavo region (Kusimba et al. 2005; Lugard 1959: 261; Soper 1965: 4; Thorbahn 1979). Thorbahn (1979: 210–211) attributes burial cairns to Oromo pastoralists, who inhabited Tsavo's arid plains until it was designated as a national park in 1948 (cf. Gregory 1968: 325). Local Taita informants have variously attributed cairns to the Wambisha and Oromo. Lone graves marked by stones along known trade routes are often attributed to Arab, Swahili, and other caravan traders and porters. It has been assumed that captive slaves who succumbed along the way – victims of thirst, disease, and a host of other agents of death – were rarely buried. Skull sites in the region are attributed to the Taita.

Our team discovered eight cranial display niche sites with skull remains. Taita internment sites were located close to villages in outlying rock shelters, rock crevices, and shallow coves. The shelters for the ancestors were placed in

TABLE 12.5 *Macropatterns or Site Clusters of the Tsavo Region*

Site Cluster Type	Features	Sites	C14 Dates [RCYBP]
Mortuary Sites	Burial mound clusters, graves, and tombs, skull niches	Konu Moju	No dates yet
Open Air Hunter-Gatherer Settlements	Prominent inselbergs, lithic scatters, grinding hollows, faunal remains, meat drying, and trade areas	Mudanda, Maungu, Rukanga, and Bungule Markets	No dates yet
Ironworking and Intensive Economic Activity Sites	Goats, sheep and cattle pens, iron smithing, agric, terraces, salt mines, grinding hollows	B1, B28, B31, K1, -K2, K3, K4, K5, K6, and K7	170 ± 70–240 ± 70
Rockshelter and Cave Sites 380 ± 70–5330 ± 70	Pottery, lithic and iron artifacts, Indian and European beads, marine shells and beads, iron artifacts, domestic and wild fauna	Kisio, Muasya, B1, B9, K1, K2, and K7	100 ± 25–1000 ± 25
Terraces Fields and Settlements	Dry stonework, terracing and irrigation canal, burial cairns, crania display niches, goat pens, food prep areas, iron and pottery making locals	B1, B28, B29, B30, B31, M1, and J1	170 ± 70–380 ± 70
Fugitive Stockade Sites		B20, B28, B31, and R1	207 ± 40–300 ± 70

dry and quiet places that were in close proximity to inhabited areas so that they could be maintained and protected from predators as well as witches. Ancestors were regularly propitiated in order for them to ward off potential calamities and crises like drought, disease, childlessness, and witchcraft. At one in Saghala, a nearby large rock was used as an altar for preparing gifts to present to ancestors. Large partially broken pots and gourds found at internment sites provide evidence for the ceremonial feasting that occurred at these sites.

Open-Air Hunter-Gatherer Settlements

As in other regions in Africa, open-air hunter-gatherer settlements were difficult to identify. However, the Tsavo landscape was marked by extensive

grinding hollows that could be found in almost all of the prominent low inselbergs and on rocks along seasonal springs and rivers. These grinding hollows ranged from a handful to several hundred. Many represented food-processing activities such as grinding cereals, roots, and skin tanning; others bore evidence of recreational use and were likely precursors of the popular African *bao* game. Still others may have been used as symbolic markers. Hobley (1895) wrote that Tsavo's prominent inselbergs were historically used as regional market centers attracting peoples from the wider region. Regional trade and exchange in bush and agricultural products are known to have occurred at inselbergs such as the prominent Mudanda Rock in Tsavo East and the Rhino Valley Rock in Tsavo West – both almost 1 km long. At Mudanda, large quantities of chert and quartz stone tools were found, although construction of a waterhole had distorted these finds. The Rhino Valley Rock area contained more than 300 grinding hollows of different sizes and shapes, showing the diversity of economic activities carried out at this locality. Future excavations will target these areas for testing the hypothesis on their role as centers for interregional trade and exchange.

Ironworking Sites

Unrefined iron or bloom and artifacts were among the principle trade items that were exchanged amongst precolonial African peoples. Field and laboratory investigations into the history of metallurgical technology in East Africa have demonstrated that early iron metallurgy in precolonial coastal East Africa was sophisticated enough to include the use of crucible steel (Kusimba 1993, 1999a; Kusimba and Killick 2003). The coastal iron makers are believed to have been capable of satisfying regional and interregional demands for iron (Gray 1957: 61; Kusimba 1993). Furthermore, African iron may have been exported to places as distant as South and West Asia, perhaps as bloom or even as finished artifacts. Hence, the rise of iron technology and trade played a key role in the development of social complexity along the coasts of Somalia, Kenya, Tanzania, and Mozambique. In later times, when knowledge of iron production was widespread, hinterland areas of abundant ores and wood charcoal could sustain major ironworking industrial complexes. One such region is Kasigau, where magnetite ore outcrops abound in the Rukanga and Kirongwe villages (Kusimba et al. 2005). Here, surveys recovered two large ironworking sites, one at Rukanga and the other at Kirongwe.

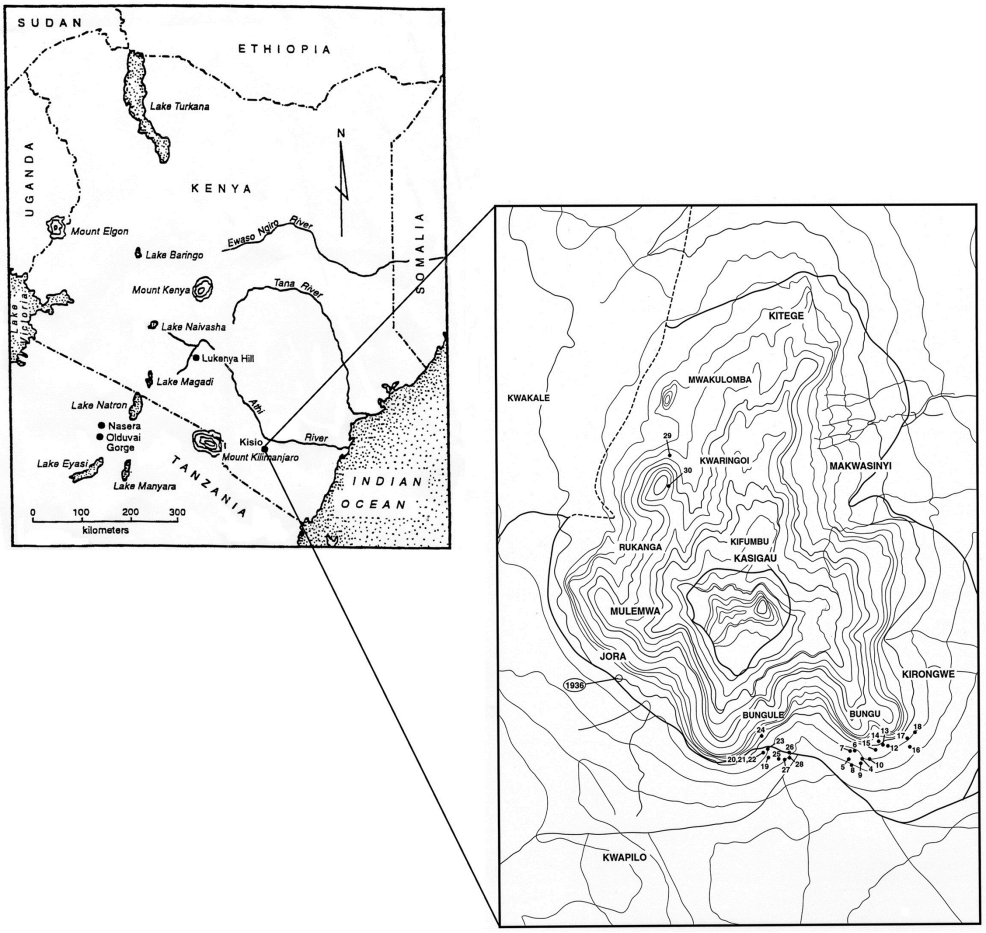
The sites cover large areas of nearly one hectare and appear to have been centers of intensive iron production for at least 800 years. A stratigraphic sequence of nine radiocarbon dates was recovered dating back to 1150 ± 70 BP at K1 (Kusimba et al. 2005). Furnace technology consisted primarily of bowl furnaces. Both iron smelting and smithing were undertaken in Rukanga and Kirongwe. The survey and subsequent excavations of smelting sites at

Kirongwe recovered five smelting furnaces at K7. The recovery of a smithy at K1 revealed multiple uses of rock shelter for residence and craft activities, including smithing. Excavated artifacts at rock shelters K1 and K2, including a stone anvil, a large volume of tuyere fragments, slag, and both finished and unfinished tools attest to the complexity of iron production in Tsavo. Significant volumes of slag and slag-wetted tuyeres found in levels 7 through 11 demonstrate that the most intensive iron smelting occurred during the deposition of these levels, dating from 840 ± 70 to 1150 ± 70 years BP. Overlying younger levels, dating to the last 500 years or so when calibration is taken into account, have much more abundant stone tools and could indicate reoccupation of the site by a group possessing an expedient technology.

Iron was an important craft and exchange item that is also preserved in the archaeological record. Historical sources indicate it was a vital part of both subsistence economies and luxury trade and its role in facilitating the clearing of cropland is well known (Huffman 1982, 1989; Oliver and Fagan 1975). However, in the Tsavo case, it appears that iron was much more important for enabling humans to kill elephants, whose ivory was in high demand in Asia and Europe. The technical quality of iron made in Tsavo was impressive. The arrowheads and spear points recovered have excellent cutting and penetrating qualities capable of serving primarily as elephant-killing weapons. It seems that ironworking industries at the Kasigau sites of Rukanga and Kirongwe serviced a clientele of complex professional hunters who made a living through the hunting of elephants and provisioning ivory to coastal merchants, as well as to local farmers.

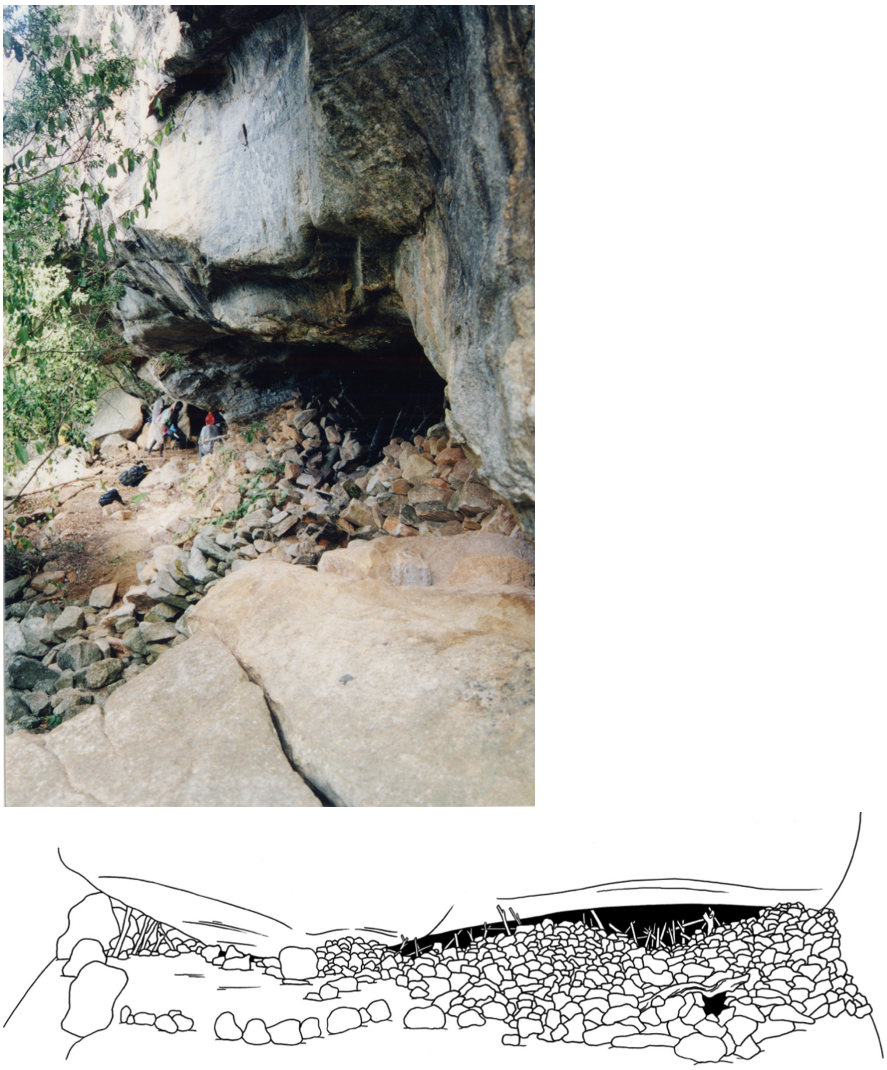
Rock Shelter and Cave Sites

Archaeological surveys, ethnohistorical evidence, and ethnoarchaeological research suggest that there may well be hundreds of rock shelters and caves in the Tsavo region. Our surveys have thus far found more than forty rock shelters and caves in the Bungule and Kirongwe areas (Figure 12.5). Before the introduction of domesticated crops, the rock shelters served as seasonal residential areas and ephemeral campsites for hunter-gatherer dwellers, judging from radiocarbon dates at Bungule 9, which go back to the late Pleistocene to early Holocene eras. Gradually, however, some of the shelters became used for highly specialized activities. Some rock shelters include grinding hollows and dry stone architecture. According to the elders of Kasigau, some served as ancestral shrines or as armories for the community's weaponry. Many were associated with rainmaking and witchcraft or served as stockades for hiding during times of stress and warfare; later many became areas for penning and pen feeding of livestock. Bungule 20, in particular, is an example of a rock shelter modified with obviously defensive intent (Figure 12.6). Informants stressed the role of these hideouts in conflicts with cattle thieves and slave traders (Kusimba 2004, 2009).



12.5. The map of mount Kasigau showing all known sites.

Although this study's informants indicated that Taita practiced irrigation farming, archaeological evidence has thus far been elusive. Surveys have revealed that the entire Kasigau hillslope contained a complex maze of terraced fields, as did Ngulia Hills. These terraced fields run across ridges that were sculpted by seasonal springs, streams, and small rivers. Each ridge contained extended family houses and their fields where they sowed sorghum, millet, beans, pumpkins, and, later, maize. Local village elders maintain that each lineage occupied several terraces adjacent to each other. The elders interviewed emphasized that the system of land tenure recognized individual rights to terraced land. Abandoned and/or poorly maintained terraces endangered neighboring terraces and thus would have been leased to individuals or families in need of land. In later years, these terraces suffered neglect as people relocated.

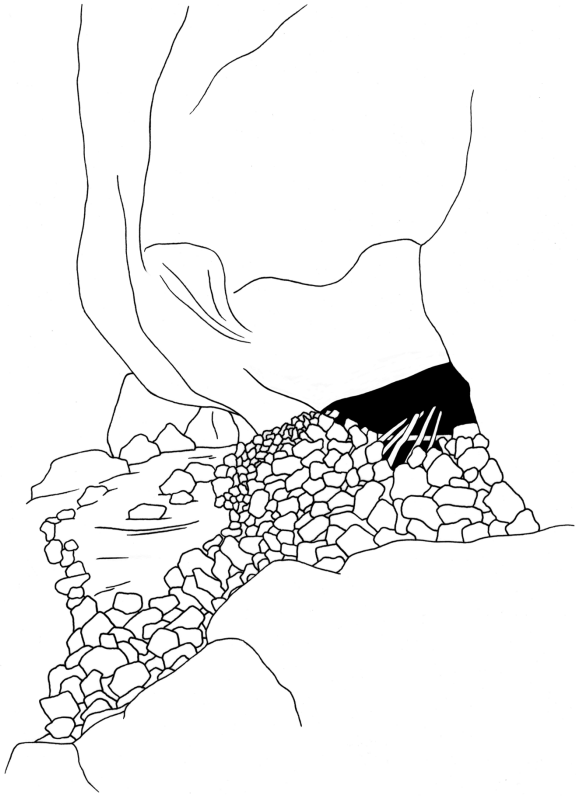


12.6. (*continued*)

Fugitive Stockade Settlements

Beginning in the seventeenth century, many rock shelters and caves were fortified as responses to declining regional security (Kusimba 2004, 2006). Out of the thirty shelters that were discovered, eighteen had some evidence of fortification. Based on our excavations of Bungule 20 and 28, which yielded radiocarbon dates on the foundations of dry stonewall, fortification may have been begun as early as 400 years ago. The enclosures have large dry stonewall faces supported by vertical wooden frames. Most sites have two sections: one for people and the other for livestock. Most have an entrance and exit and, in these cases, both access points were protected by wooden partitions that run

12.6 (*cont.*)



12.6. Bungule 20, showing both the photo and illustration.

parallel to the wall. For example, Bungule 20 is a formidable structure measuring 66 m² with a ceiling height ranging between 0.30 and 1.75 m.

As in other enclosures, a partitioned area was constructed to separate people from their animals. Surface finds include an almost intact bed, a hearth, and pottery shards. These, however, are modern surface deposits not associated with the primary *in situ* archaeological deposits. Three radiocarbon samples obtained from the vines and wood holding the dry stone wall had uncalibrated radiocarbon ages of 207 ± 40, 290 ± 70, 300 ± 70 BP, placing the calibrated date of construction of the dry wall sometime in the last 400 years at two standard deviations.

Excavations also revealed a detailed process of dry stone construction. This involved the digging of a foundation and erecting of a wooden frame with termite resistant hardwoods tied with twine. Large rocks were then piled along the wooden frame from the base foundation, and smaller blocks were fitted into any open spaces remaining. Finally, clay soil from the termite hills was applied as a plaster seal to ward off insects and weatherproof the wall. The

resulting structure was strong, impenetrable, and aesthetically beautiful. The recent date of rampart construction and paucity of cultural artifacts corroborate with the oral histories of the informants, indicating that Bungule 20 and other similar rock shelters were fortifications against and refugia from slave hunters and others feared by Kasigau people.

THE SIGNIFICANCE OF MOSAICS IN FOSTERING SOCIAL AND ECONOMIC NETWORKS

Based on the radiocarbon dates now available from Tsavo, the chronological history of Tsavo can be reconstructed into five major periods (see Table 12.6) (Kusimba et al. 2013). Ecological diversity encouraged internal trade and exchange amongst Tsavo's inhabitants. Affinal bonds of friendships, usually referred to as blood brotherhoods and/or sisterhoods, were established among trading partners to enable trade and safe passage in what would otherwise have been hostile territory (Kusimba et al. 2013). The trade boom in ivory, iron, salt, cloth, ornaments, and foodstuffs created local and regional entrepreneurs among the Akamba, Taita, Waata, Giriama, Swahili, and other communities (Kimambo 1970; Middleton 2004; Muriuki 1974; Prins 1961: 99; Robertson 1997; Unomah and Webster 1976: 277). Thus, trade and other opportunities spawned subsidiary craft-specialization enterprises. These would include iron smelting and blacksmithing to provision hunters, herders, miners, farmers, and warriors; poison making to provision hunters and warriors; basket making to provision caravan traders and porters; potters and grindstone carving to provision farmers, hunter-gatherers, and herders. At the high point of this regional economy, intensification was a response to regional and extraregional demands.

Between 1400 and 1600 CE, Kasigau was a major distribution center for local and regional trade, as well as a lodging and camping ground for interior and coastal long-distance trade. Trade items exchanged at Kasigau included beads, cloth, textiles, honey and beeswax, fresh fruits, milk, ivory, rhinoceros horns, and animal skins. The introduction of coastal crops like coconuts, tamarind, oranges, lemons, and mangoes in Kasigau was in part due to the response made to the trade boom and the high demand of these products by coastal traders. Everyone in the Tsavo region and beyond appears to have been involved in regional trade (Smee and Hardy 1811: 176). The presence of refuge sites (Kusimba 2006; Marshall 2011) attests to the widespread insecurity and collapse engendered by the colonization of the East African coast and the rise in the slave trade.

SCALE THREE: THE TRANSCONTINENTAL SCALE

The final, transcontinental scale of interaction brings us back to the original lure of the Swahili for the archaeological founders of the field, whose

TABLE 12.6 *Chronological History of Tsavo and Its Relations to Neighbors*

Periodization		Subsistence Economy	Residences	Contact with Neighbors	Contact with Coast	Sites
Period 1 [10,000–3,000 BCE]	Early Holocene–Late Holocene	Hunting and gathering	Open rockshelters and caves	Person-to-person trade	No evidence for trade	B9
Period 2 [3,000–500 BCE]	Pastoral Neolithic/Early Iron Age	Hunting and gathering, livestock keeping, gardening pastoralism	Open and closed rockshelters and caves, agrarian villages, and pastoral camps	Regular trade with interior communities and neighbors	Some trade with the coast	B7 and B9
Period 3 [500 BCE– 1,000 CE]	Early Iron Working	Forager and gardening and agropastoral communities	Build-up rockshelters, caves, villages; build on terraces, pastoral villages, and camps	Regular markets in the interior communities and neighbours	Regular trade with the coast	B7, B9, K1, K2, K3, K4, and K5
Period 4 [1,000 CE–500 CE]	Late Iron Working	Forager, agrarian, and pastoral communities	Build-up rockshelters, caves, large villages and homesteads, pastoral villages and camps	Increased number of hinterland markets, introduction of terraced farming, meat and milk, pastoralism	Increased trade and more regular interaction with the coast	B1, B7, B9, B29A,
Period 5 [500 CE–100 CE]	Colonial Period	Forager, agrarian, and pastoral communities	Fortified rockshelters and caves, migration to hill tops,	Decreased trade and collapse of traditional market systems, abandonment of terraced farming increased tensions, increased intercommunity warfare	Decreased trade with coast, increased tension with coast	B9

explanatory framework of external origins has been soundly rejected, but whose examinations of nonlocal pottery and other imported artifacts have still provided benchmarks of chronology for many Swahili sites. Apart from conveying the basic spatial differences between elites and nonelite groups within cities, the type and volume of prestige goods also provides information on differential tastes, preferences, and networks within elite groups and the changing fortunes of the different elite localities within a trading center (Junker 1999, this volume; Kusimba 1999b).

The Islamic Era in the Indian Ocean (700–1750 CE) was characterized by a prestige goods network that linked elites from East Africa and Southwest, South and Southeast Asia, leading to overlapping tastes and preferences for luxury consumables, commodities, and gifts (Sheriff 2010). Since the early fifteenth century CE, Chinese blue-and-white porcelains had been the most desired prestige ceramics in the Western Indian Ocean, and were also imitated across the Indian Ocean, especially in Southeast Asia – Vietnam and Thailand – and Southwest Asia – Persia, Syria, and Turkey (Middleton 2004).

At Mtwapa, an analysis of trade ceramics, including Chinese blue-and-white, Chinese celadon, and Chinese white porcelains, shows that in the diverse urban society of Mtwapa, foreign ceramics were highly restricted (Oka 2008). Before 1600 CE, localities 4, 5, and 6 showed similarities in the distribution of all the trade ceramics, especially glazed wares. However, this trend was completely reversed in the post-1600 CE period.

The majority of the trade ceramics at Mtwapa are relegated to one area, Area 4, located within the main Friday Mosque Complex. This area was the main gathering zone where city elites would gather to display their status through giving alms to poor and public feasting. The large collection of trade ceramics contrasts with finds in residential quarters, which had comparatively fewer trade ceramics (Fleisher and LaViolette 2007). After 1600 CE, the prestige goods received by elites through trade were not kept for display in their homes as before but were increasingly used for public feasting and gift giving at the Friday Mosque. The resultant attrition of wealth was compounded by the decline of local craft-production (e.g., iron, steel, cloth).

Given that ceramics are extremely rare even in Mtwapa's urban context, they can hardly be expected to provide a good signature of the extent of regional and transcontinental trade across scales. However, the Tsavo regional landscape provides much evidence for transoceanic interactions in the form of a domesticated landscape (Greenway 1944: 115–116) consisting of abandoned orchards of mango, oranges, lemons, and tamarind. These South and Southeast Asian domesticates provide the best evidence yet of East Africa's deep-time interactions with Asia. Yet, this landscape only speaks of one segment of the Tsavo mosaic. To address the entire mosaic, one must turn to a little-known artifact – the bead. Beads are an appropriate means for reading

transcontinental networks, which often do not leave abundant archaeological traces (van der Sleen 1967: 76–91; Wynne-Jones 2010). Beads, unlike pottery, are portable, durable, visible, and highly amenable to the wearer's manipulation and self-expression. From a trader's standpoint, beads symbolized an investment opportunity unlike any other in human history. Beads reached the global market, from the poorest of the poor to the wealthiest socialites of the time. Compared to other crafts, such as ceramics, porcelain, and jewelry, the returns for beads were much larger. Due to their small size, large numbers of beads, literally millions, would have been exported. One shipment of beads of different colors and sizes would have fetched enough profits to last a lifetime. Beads thus represent a kind of intensification of trade strategy. One could also argue that the small size and relatively small value of beads would encourage them to be widely traded beyond the Swahili coast once they arrived there as part of larger and more diverse commodity flows. Indeed, one of the most striking patterns that emerged from the Tsavo surveys was that glass beads were found at every site excavated, while other coastal artifacts such as pottery were much rare.

By the first century CE, Africa's trade relationships with Eurasia began increasingly to be controlled by growing state societies and significantly contributed to bidirectional biological and technical transfers (Mitchell 2005; Oka and Kusimba 2008a; Pearson 2003). Improvements in shipping technology and the introduction of the camel made it possible to trade across the Indian Ocean with East Africa and across the Sahara with West Africa. Gold, salt, ivory, hides, and spices were typical commodities in this commerce between north and south. Nevertheless, beads were part of this interaction and wherever they occur, they bear witness to the connections that no other archaeological artifacts can show due to their beauty, universal appeal, affordability, and preservation.

Despite the ubiquity of archaeological glass in Africa, this class of trade artifact remains one of the least studied on the continent. Compared to other regions, fewer chemical and analytical studies have been carried out on African archaeological glass (but see Davison 1972; Wood 2000, 2012). Recent studies of chemical analysis with laser ablation – inductively coupled plasma – mass spectrometry LA-ICP-MS of glass beads from South Africa, Botswana, and Madagascar have provided a better definition of the glass groups and reported, for the first time, a possible glass-manufacturing site in Africa, dating to around the tenth century CE, which contradicts a long-held view that preindustrial Africans did not produce glass in the early period.

Three different archaeological sites in Kenya were investigated: from the urban coastal site of Mtwapa, and from Bungule and Muasya Rock Shelters in Tsavo. Forty-five beads from Mtwapa were analyzed, sixty-three from Bungule, and twenty-six from Muasya Rock Shelter. The beads were drawn

TABLE 12.7 *Repartition of Bead Composition by Sites*

	m-Na-Al 2 glass	European Compositions
Mtwapa	43	0
Bungule	5	58
Muasya	3	23

and of variable shape and color – monochromatic, red, turquoise, and green. The beads from Mtwapa appear to match the definition of a type of bead called the "Indo-Pacific Monochrome Drawn Beads," or IPMDB, quite well (Francis 1990). These beads are part of the "Trade Wind Bead" group (van der Sleen 1973) that also includes wound beads. These IPMDB have been identified from Africa to Japan and are known to have been manufactured in different places located in South and Southeast Asia over two millennia.

The beads from Bungule have a more diverse typology compared to those of Mtwapa, even though most Bungule beads were made using the drawn technique. Drawn beads can have a very small diameter (2–3 mm) and are barrel or annular shaped. These beads are white (12), blue – from turquoise blue to dark blue (10) – dark brown (10), pink (8), greenish (2), yellow and red (1 for each color). All these beads were opaque except for a dark blue one that was translucent. The color, size, and shape of the Bungule beads are very different from those at Mtwapa. At Muasya Rock Shelter, only barrel-shaped beads in blue (13), white (10), opaque red (2), and opaque red over a greenish core (1) were found. A description of the distribution of the glass compositions by site is found in Table 12.7. All glass beads from Mtwapa belong to the m-Na-Al 2 glass type and are likely to be imports from South Asia (Dussubieux et al. 2008). Muasya Rock Shelter accounted for only three glass beads from South Asia compared to twenty-three of European origin. Like Muasya, Bungule accounted for more European than South Asian glass beads. The diversity of European compositions exhibited at Bungule is wider compared to Muasya. The presence of European composition at Bungule and Muasya is likely due to the fact that these sites were occupied for a longer period (Table 12.7).

Based on the analytical results carried out by Laure Dussubieux using the LA-ICP-MS instrumentation, it has been concluded that the glass bead trade in East Africa belonged to two different networks: the Afrasian Trade Network (ATN) and the Eurafrasian Trade Network (ETN). The ATN involved the Indian Ocean, Middle East, and South Asia, while the ETN appears to have primarily been concerned with European commerce in the Indian Ocean. Mtwapa was linked to the ATN, while Muasya and Bungule were part of the ETN (Dussubieux et al. 2008).

CONCLUSIONS

Swahili urbanism, being a product of trade networks on local, regional, and international levels, requires a multiscale perspective. Using this approach, it has been possible to gain an understanding and appreciation of the contributions made by all segments of society, including commoners, peasants, the underclass, and slaves, groups often left out of early historical accounts of Swahili urbanism. The archaeological findings from the three interactive regions have provided a long-term perspective on change, documenting the origins of herding, pastoralism, and agriculture, the rise of urbanism, and other transformational social changes, including the decline, collapse, and colonization of the region. Data from many sites within the different ecological zones and regions has allowed systematic comparative analysis of these changes and social patterns

The specific geographical location of coastal society influenced a mercantile character, such that it was shaped by social and economic processes on multiple geographic and temporal scales. The survey and excavations discussed here show how the urban center of Mtwapa was influenced by and responded to local, regional, and transcontinental interactions. The favorable location of this coastal settlement could not be usefully exploited without forging partnerships with the hinterland, other coastal communities, and foreign merchants. These partnerships involved formalizing affinal ties into long-lasting friendships that promoted peaceful coexistence, tolerance, and the sharing of the region's diverse resources (e.g., Mabogunje 1962). Wealth accumulated from these interaction spheres created differences among the Mtwapa residents, which would in time increase the social and ethnic diversity of the coastal region. Out of these diverse communities, stone towns may have grown in size primarily as religious centers after the appearance of Islam on the coast (Fleisher 2010).

Paul Sinclair (1995) proposed that the trading centers on the East African coast were linked together in urban clusters where different locations had specializations in production and trade. Sinclair et al. (2012) combine data from Chibuene and other sites in the interior to illustrate the importance of regional multiscalar approaches toward understanding early interactions and exchange. They show that Chibuene's location on the southern end of the East African coast provided it with exclusive access to long-distance networks. As a port of entry for trade goods found in the interior regions of southern Africa from AD 750 until ca. AD 1000, Chibuene was "a nodal point connecting individual traders from at least three networks: the southern African interior, the northern coastal trade network and the transoceanic trade network" (Sinclair et al. 2012: 735).

Similarly, the research presented in this chapter shows that Mtwapa, like other ports on the coastal mainland, played a significant role in linking the interior with the coast and beyond. The regional perspective that has been employed in

this project brings to light the Swahili coast's connection to diverse ethnic and economic mosaics of the interior and to the importance, not just of Chinese porcelains, Indian cloth, and Islam, but also of iron, honey, buttermilk, and poison. Trade beads and marine shells are found in coastal contexts and in rock shelter sites in the immediate hinterland that have been occupied since the Later Stone Age (Helm et al. 2012) and at Tsavo demonstrate regional contact with the Coast (e.g., Wood 2012; see also Mitchell 2005: 27; Pikirayi 2001). Furthermore, the presence of refuge sites attests to the widespread insecurity and collapse engendered by the colonization of the East African coast and the rise in the slave trade (Kusimba 2004, 2006).

With the increasing popularity of source and materials analysis, archaeologists are eager to fast-track artifact analysis to the transcontinental scale of analysis. However, the artifacts that are signatures of long-distance trade can only be meaningful as part of well-described and sampled sequences at a local and regional level. In addition, because of their rarity, the significance of beads and other residues of trade in international commodities – many, such as textiles, likely absent from the archaeological record – can only be understood within a well-developed formal and chronological context provided by systematic survey and excavation. Large-scale surveys of hinterland regions, such as Tsavo, show the effects of urbanization on the Swahili coast, but also the rise of insecurity and slave trade as a result of Portuguese and later colonization. The Tsavo results need to be synthesized with those from other large regions such as the Tanzanian interior (Walz 2010) to understand the true reach and impact of Swahili urbanism. Unfortunately, the intermediate, regional levels of archaeological research in Africa – one based, in an ideal world, on systematic surveys of large areas – remains a logistical challenge for Africanist archaeology. However, without understanding the societies from which the Swahili emerged and of which they were a part, our picture of them will continue to remain blurred.

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THIRTEEN

CONFLICTIVE TRADE, VALUES, AND POWER RELATIONS IN MARITIME TRADING POLITIES OF THE TENTH TO THE SIXTEENTH CENTURIES IN THE PHILIPPINES

Laura Junker

INTRODUCTION

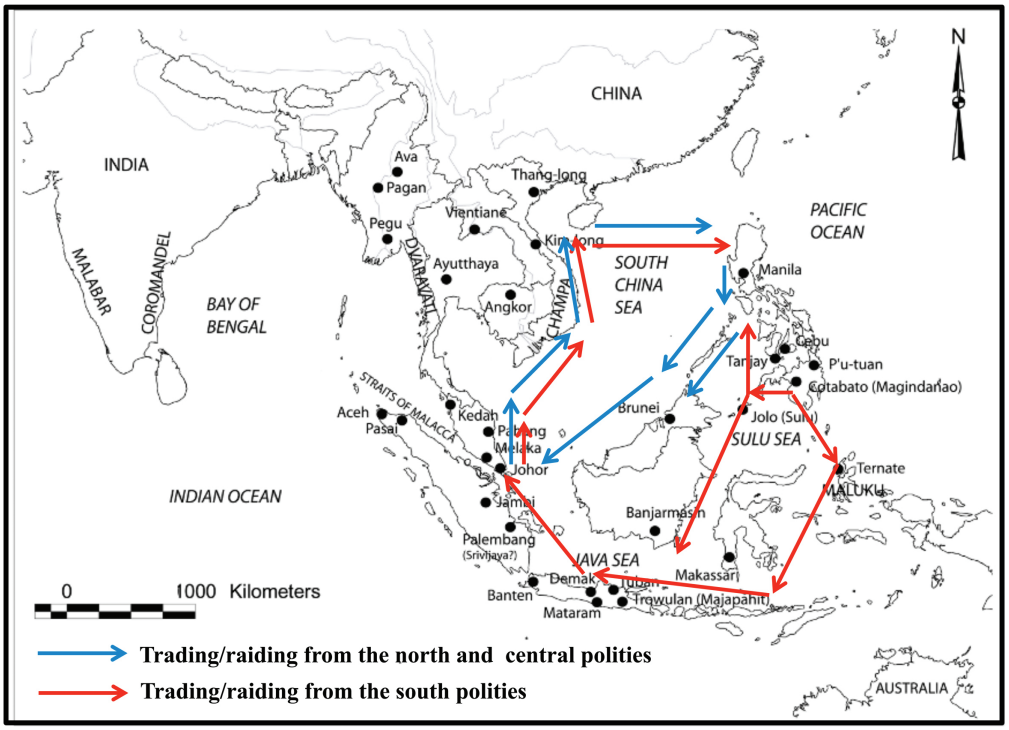
As a study of multiscalar, multiethnic, and conflictive trade, historical sources, archaeological evidence, and ethnographic work are combined to examine the long-term history of trade and social dynamics among early historic tenth- to sixteenth-century Philippine maritime trading polities, their foreign trade partners outside the archipelago, and culturally distinct interior groups enmeshed in local exchange systems, including small-scale swidden-farming societies and mobile foragers. In previous studies of precolonial island Southeast Asian maritime and riverine trade, researchers have emphasized a largely economic "exchange value" and top-down approach in which, if they considered social contexts of exchange at all, power differentials were viewed as created by elites in urban production centers, and flowing unidimensionally from these power centers in a "frictionless" manner through increasingly disenfranchised local chieftains, tribal populations, and small-scale foraging groups (cf. Andaya 1992; Hall 2004; Junker 1999a; Miksic 1984). What this view has masked are all the complexities of power relations and the "multiple histories" coming out of interweaving the historical and archaeological narratives of the many players in the Philippine trade networks of the eighth to nineteenth centuries. These include the Chinese imperial merchants and nefarious traders running under legal trade radar; the Thai and Vietnamese porcelain trade interlopers; traders and raiders emanating out of the many combative Philippine maritime polities;

and the upland "tribal" peoples and foragers who controlled direct access to valued export goods. In addition, even supposedly marginalized peoples such as these small-scale societies on the edges of larger-scale chiefdoms and the multiethnic females captured and enslaved in what might be called violent or seditious trade, were important catalysts not only in moving goods and disseminating technologies, but also in transforming ideologies and social dynamics, languages, and ethnic identities.

The preceding is an attempt to demonstrate the value of a multiscalar and multivocal framework for examining trade and social dynamics using archaeological evidence from the Tanjay region of the Philippines, the center of a small-scale maritime trading chiefdom of the first half of the second millennium AD. In this roughly 300 km^2 alluvial plain and surrounding mountains, trade networks intersect at multiple levels. Archaeological studies on maritime trading kingdoms and chiefdoms of Southeast Asia from the mid-first millennium AD to European contact have traditionally emphasized long-distance trade for luxury goods (particularly porcelain) within the South China Sea–Indian Ocean trade sphere as the most significant variable in emergent sociopolitical complexity in this period (Figure 13.1), but largely devoid of any analysis of the social implications of this luxury goods trade on the local level (Hall 2004; Hutterer 1977; Junker 1990, 1999a, 2003). Because early archaeological work emphasized single size (and almost exclusively burial contexts), and due to the almost total lack of scholarly dialog between archaeologists and historians, few scholars have explored the role of foreign status objects in interpolity negotiations between regional power brokers attempting to expand their influence within the archipelago. On a local scale, prestige goods production and trade are key ways to materially create political currency for coalition building amongst elites and would-be elites tied to chiefs at local centers. Finally, individual settlements and the various actors who inhabit them are the focus of specialized resource procurement and craft production, and the varying strategies and agendas for translating material resources into useful social connectedness and political clout.

As archaeological studies began to emerge that focused more explicitly on the social and political aspects of trade in the period of archaic state emergence in Southeast Asia, most researchers sought to "simplify" the empirical evidence into a homogenizing model of causality and process that focused on the broadest scales of analysis. However, it is now time to call for archaeological analysis that "complicates" the picture of political competition and social manipulation associated with the vast maritime trade networks of Southeast Asia in the eighth to sixteenth centuries by providing a more intimate portrait of local exchanges and social relations embedded in these maritime trade networks on the "microscale" level of regions and settlement, individuals, and groups.

Major Trading/Raiding Routes from the Philippines ca. A.D. 1600



13.1. Location of major trade ports and kingdom/imperial capitals in Southeast Asia between the seventh and sixteenth centuries, along with the centers of Philippine chiefly polities. The general location of trading and raiding routes associated with Philippine polities around the South China Sea between the twelfth and sixteenth centuries are also shown.

There are several intertwined issues that have often prevented archaeologists from providing a more realistically "complicated" picture of social connection and interaction in multiple scales of analysis. Recent work on scalar issues noted previously (e.g., Gilcrist 2005; Graham 2006; Hall et al. 2011; Kolb and Snead 1997; Rouse 2011; Sindbaek 2007; Stein 2002) has suggested that geographically expansive models of exchange within such theoretical frameworks as world systems and core-periphery archetypes have tended to assume that (1) exchange connections initially develop equitably as linear chains, but they become "centered" on certain nodes as the possibilities for control emerge through growing social inequality; (2) people situated all along these exchange chains have similar and omniscient views of this increasingly hierarchical trade structures; (3) individuals and groups on the receiving end of efforts to consolidate power are often passively receptive rather than resistant to attempted hegemony; and (4) these structures, once formed, are relatively static and not dynamic both in the short term and long term. Instead, real-world

exchange networks tend to form as "small world" clusters with people strongly connected by proximity, kinship, and other social structural factors exchanging both material goods and nonmaterial social and ideological capital, with these hubs linking dynamically to more distant hubs for various political, social, and economic reasons that may be teased out through detailed analysis at multiple scales. Most significantly, actors and groups in these networks often have a narrow and shifting view of the situation on a regional and transregional level, which leaves power relations in these networks open to interpretation and creates opportunities to ignore, contest, and avoid unfavorable forms of interaction.

The approach in this chapter is not to dismiss "world systems" conceptualizations as able to provide insights into large-scale trade patterns (see Hall et al. 2011; Killick 2009; Stein 1999 for arguments on the value of reformulated "world systems" models), but instead to emphasize the value of a multiscalar research orientation. This approach is particularly essential in archaeological studies of social relations in Southeast Asia. Defining features of the region are extremely diverse environments and physical landscapes that tend to emphasize specialization and exchange, fluid forms of social interaction, and complex cultural and social landscapes with intermixed foraging societies, small-scale tribal agriculturalists, a variety of "middle-range" societies that might be classified as "big man" societies or "chiefdoms," and state-level societies of varying scale (e.g., the early Funan state), the latter sometimes coalescing into expansive "empires" at various points in history (e.g., the Khmer, Majapahit) (Hall 2011; Junker 2003; Reid 1988; Stark 2006; Winzeler 1981).

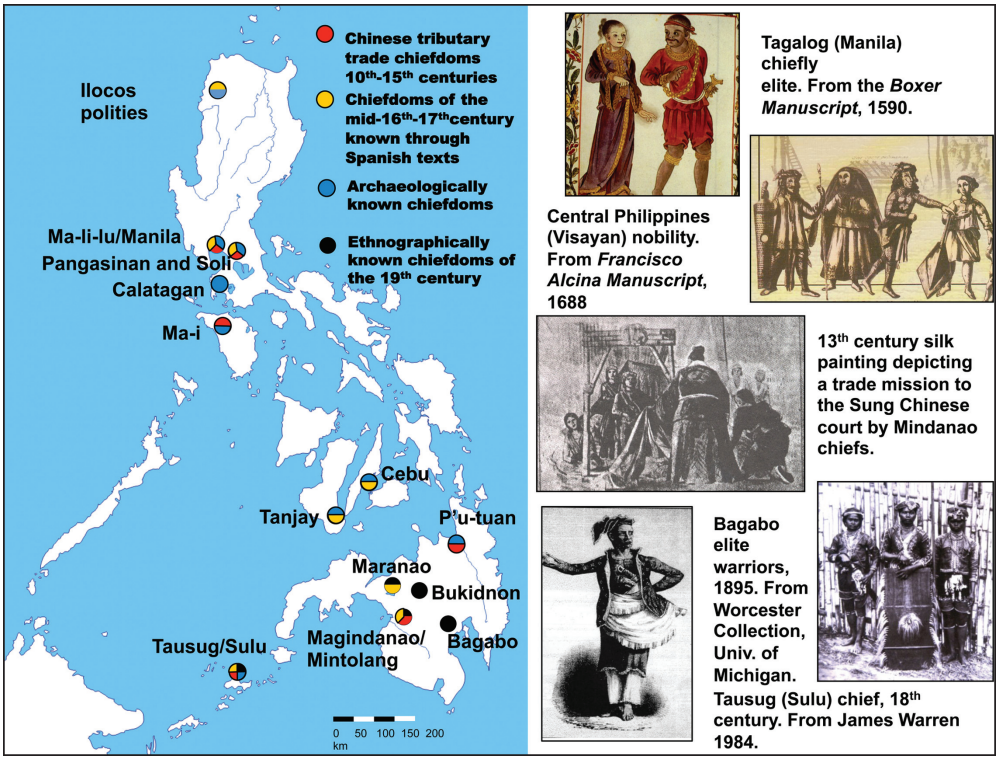
A second concern in examining trade within the social and political landscapes of premodern complex societies in Southeast Asia is for multivocality in examining the past – historians, archaeologists, art historians, and ethnographers working in Southeast Asia have only recently begun to cross traditional disciplinary boundaries and attempted to use multiple lines of evidence – not only varying scales of archaeological analysis, but also historic sources from differing cultural perspectives, and ethnographic work on historically descendant populations (Hall 2004; Junker 1998; Lape 2006; Stark 2006). By adopting multivocal and multiscalar approaches, we can challenge the type of "top-down" approach to trade that tends to assume that demonstrable power differentials between trading societies of differing scale and complexity mean that those at the center of the more complexly organized and larger-scale political entity must necessarily control the dynamics of exchange; they can only do so through one-sided coercion; and that "resistance" is the only possible role for actors within smaller-scale social groups. In the archaeological analysis in the following text, it is argued that forms of exchange at all levels are fraught with differing social agendas and social conflict, and that areas of tension in trade and social interaction need to be examined at multiple scales

of analysis. Particular attention should be paid to groups and individual actors that are not part of the more archaeologically visible administrators and elites within trade-connected societies, as well as those "along the margins" of complex societies who may speak different languages and are of different ethnicity, but often function as key elements of regional political economies. In the following examples, these groups include local would-be leaders challenging elite dominance; upland forager and small-scale farming groups trading critical products to lowland chiefdoms; and the multiethnic and mostly female slaves taken in massive raiding by larger-scaled polities, who are not as materially and historically invisible as archaeologists often believe.

THE COMPLEXITIES OF POLITICAL LANDSCAPES, SOCIAL NETWORKS AND TRADE IN THE TENTH–SIXTEENTH CENTURIES IN THE PHILIPPINES

Prior to Spanish contact in the sixteenth century, the Philippine islands, like most of Southeast Asia, were inhabited by an eclectic mix of ethnically and linguistically distinct societies ranging from small-scale hunter-gathering bands, to what might be termed as socially ranked tribal societies, to hereditarily stratified chiefdoms, and even larger-scale Islamic sultanates like the Sulu and Magindanao (Junker 1999a; Scott 1984, 1994; Warren 2007; Figure 13.2). By the Metal Age in about 1000 BC, archaeological evidence for differential distribution of status goods in burials (including elaborate bronzes, decorated earthenware, and exotic beads) suggests the growth of chiefdom-level societies involved in long-distance prestige goods trade along the Philippine coasts (Bacus 1996; Dizon 1998; Hutterer 1977; Junker 1999a). By around AD 1000, Chinese texts provide us with the names and descriptions of Philippine chiefs and their polities that began to make maritime tributary missions to the Chinese court, offering spices, marine delicacies, and forest products for Chinese silks, porcelain, and other exotic luxury goods that had expanding significance in their chiefly political economies (Junker 1998; Scott 1984).

By the fifteenth to the sixteenth centuries, archaeological evidence coupled with European accounts show that polities like Manila, Cebu, Sulu, and Magindanao were centered at well-fortified cities (many with populations in the thousands) protected by locally produced Chinese-inspired cannons and artillery, and housing significant populations of Chinese and other foreign merchants (Hutterer 1973; Junker 2005). They attracted numerous foreign ships annually from China, Japan, Siam, and other ports in island Southeast Asia, and they sent off traders, raiding expeditions, and military mercenaries to the far corners of the South China Sea–Indian Ocean trading universe (Junker 1999a: 183–220; Scott 1994). Descriptions of social stratification in both earlier Chinese texts and contact period European texts indicate that social division



13.2. Polities of the late tenth- to early twentieth-century Philippines known through Chinese tributary trade records and traveler narratives, Spanish accounts of the European contact period, ethnographic studies of extant late nineteenth-century and early twentieth-century Islamic polities, and archaeological evidence.

between elites and nonelites were at least nominally ascriptive, but allowed a great deal of social mobility through class-exogamous marriages and superior performances in warfare, trading, and wealth acquisition (Junker 2003; Scott 1983). As argued in more detail in some of my earlier publications (Junker 1999a, 2003, 2005), aspects of population and ecology in the region meant that fluid control of human capital and portable wealth, rather than stable hegemony of fixed territories and their resources, was characteristic of Philippine chiefdoms and consistent with structures of early states in Southeast Asia that are described as "decentralized," "segmentary," and held together through "theatricality" (e.g., Bentley 1986; Geertz 1980; Tambiah 1976; Winzeler 1981). It is important to note that Spanish conquest was not the effective end of political or economic independence of many Philippine chiefdoms because the Islamic sultanates of Sulu, Magindanao, and Maranao, as well as non-Islamic Bagabo and Bukidnon chiefdoms resisted Spanish and even American colonial rule until the early twentieth century (Figure 13.2), and there is significant ethnographic and historic work on these polities well into the recent century that

TABLE 13.1 *Imports and Exports Associated with Various Fourteenth-Century Philippine Polities, as Enumerated in Wang Ta-yüan's Tao Chih Lüeh of AD 1349*

Included Are the Probable Locations of These Polities (also see map in Figure 13.2)

Philippine Polity	Exports	Imports
San-Tao NE Luzon	Beeswax, textiles, cotton	Copper beads, porcelain bowls, iron
Ma-i Mindoro	Kapok, beeswax, tortoise shell, betelnut, textiles	Iron cauldrons, other iron, red silk, ivory, silver coins
Minto-Lang Mindanao (Magindanao?)	Wuli wood, musk, sandalwood, cotton, animal skins	Lacquerware, copper, tin, wine, Java cloth, red silk, blue cloth
Ma-li-lu SE Luzon (Manila?)	Tortoise shell, beeswax, laka wood, kapok, Jwu-bah cloth	Ting bronzes, blue cloth, porcelain jars, iron cauldrons, "big pots"

supports the general view of political economy presented in the early historic records (e.g., Beckett 1982; Biernatzki 1985; Claver 1985; Cole 1913, 1956; Kiefer 1972).

Archaeological work in the Philippines primarily involving excavations of burials containing an array of exquisite Chinese porcelain (dated as early as the early Sung Dynasty, and later expanding to include Thai, Vietnamese, and Japanese pieces), attest to an intensive and expanding maritime porcelain trade. However, the Chinese trade records that provided the locations of various pre-sixteenth-century Philippine polities (see Figure 13.2), indicate that porcelain is only the most materially visible of the Chinese luxury goods imported into the Philippines. Bronze and iron objects that could be recast into local weaponry, gold, silver, lacquer ware, and silks were also traded into the archipelago as prestige goods, largely in exchange for forest products (such as beeswax, hardwoods, spices, betel nut, animal skins, and musk) and marine products (particularly pearls and *trepang*) (Table 13.1). Philippine chiefs attempted to attract foreign trade partners by investing in port facilities, developing efficient systems for mobilizing desired export goods, and in the larger-scale polities like Sulu developing a a bureaucracy of specialist trade administrators. Tributary trade missions to the Chinese court were also an effective but high-stakes and costly strategy for competing with other polities for favored trade status because they required lavishly outfitted retinues who appeared substantially wealthy and the presentation of export commodities of sufficiently impressive value, volume, and diversity to convince Chinese officials of the superiority of a particular Philippine chief as a preferred trade partner. However, for Philippine chiefs who could successfully launch a series of increasingly elaborate tributary missions, the payoff was often enormous in terms of future

foreign trade revenues and the enhanced prestige gained through possession of Chinese titles and royal seals (Junker 1999a: 213–216).

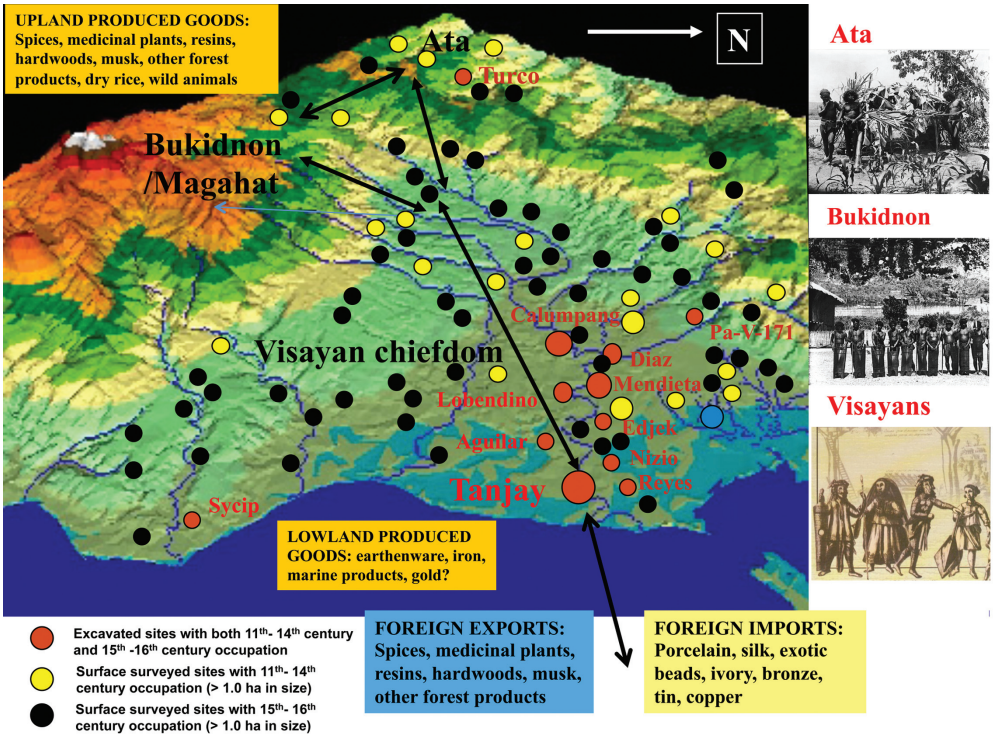
Ethnohistoric analysis suggests that foreign status goods, along with locally produced decorated earthenware, gold ornaments, and finely woven cotton textiles that may have been manufactured by attached craft specialists, became increasingly key symbols of status, wealth, and political power in Philippine complex societies, permeating every aspect of rivalry for social ascendancy and political ascendancy (Bacus 1996; Barretto-Tesoro 2008; Dizon 1998; Junker 1990, 1999a). These included rivalrous attempts to expand alliance networks through strategic marriages bought by spectacular gifting, expanding exchange partnerships and political coalitions maintained through a constant flow of elite emblems, harnessing the labor of attached craft specialists (Junker 1993, 1994a; Scott 1994), intensifying warfare strategies meant to disrupt rival long-distance trading polities, increasing slave raiding as a means of labor capture (Junker 1999a: 131–137, 339–343, 2008), and building ritual potency through public sacrifice and ritual (Junker 1999b). Many of the components of status rivalry and political coalition building converged in "feasts of merit," a ubiquitous fixture defining chiefdoms of the archipelago in twelfth- to sixteenth-century Chinese, sixteenth- to seventeenth-century Spanish, and nineteenth-century ethnographic studies (Junker 2001a; Junker and Niziolek 2009). These "feasts of merit," which celebrated marriage, warfare success, and numerous other politicized activities, were both the primary rationale for porcelain acquisition and a significant catalyst for perpetual circulation of porcelains and other exotic valuables between polities and within intraregional social networks. These coastal polities not only allied, traded, intermarried, and warred with one another, but also maintained extensive trade networks and intensive social relationships with smaller-scale interior societies that are referred to by ethnographers as "tribal" agricultural societies and mobile "bands" of foragers occupying regions (often interior and upland) adjacent to the coastal center (Allen 1991; Hutterer 1977; Junker 1996, 2001b, 2002; Miksic 1984). Therefore, the "regional" social landscape in most Philippine chiefdoms was multiethnic, encompassing culturally and linguistically distinct populations that maintained social relationships that were at once symbiotic and fraught with conflicting motivations, strategies, and perceptions.

The complexities of the larger Philippine sociopolitical landscapes over both time and space emphasize the folly of a homogenized model of the political dynamics of trade within the archipelago and the social structures materialized in these interactions, particularly the significance for local production choices, labor priorities, "wealth" manipulation, and the creation of social asymmetries. Historical sources between the tenth and sixteenth centuries tend to focus on trade and social interaction at prominent centers targeted by the foreign writers (primarily Chinese and Spaniard) who are concerned with identifying

resource-rich markets and sources of native resistance to external control through a culturally biased lens (Junker 1998; see also Lape 2006). This lacuna leaves archaeology as the major avenue for obtaining what we might call a "microscale" or "small world" view of trade within a bounded region of high-frequency social interaction. In this case, this includes both the coastal centers within the archipelago where sea-transported exotic imports first entered into the local social landscapes, and larger social spheres within which they were further exchanged, often referred to as their regional "hinterlands" or simply "local interaction spheres" (e.g., Miksic 1984 and Hall 1984, but with perhaps too much emphasis on the primacy of coastal ports and connotations of centralized and hierarchical control).

THE PERSPECTIVE FROM TANJAY: A TWELFTH–SIXTEENTH CENTURIES MARITIME TRADING POLITY OF THE CENTRAL PHILIPPINES

Unfortunately, the type of intensive, sustained regional archaeological research necessary to analyze localized social networks and contexts of exchange has been limited (cf. Allen 1991; Hutterer 1977; Miksic 1984; Stark 2006), hampered by the difficulties of funding large-scale projects and locating sites in an archaeological landscape with wholly perishable settlement architecture. In the following, an attempt will be made to describe a more intimate portrait of how both foreign exotics and local goods cemented social relations and were manipulated in various ways as political currency within a circumscribed, multiethnic, regional social landscape, particularly in the last two centuries prior to European contact. A long-term, regional-scale archaeological project has been carried out in the 315 km^2 Tanjay region of eastern Negros Island between 1979 and the present (see Hutterer and MacDonald 1982; Junker 1999a) – a region that includes the largest alluvial plain on eastern Negros Island traversed by the Tanjay River and its tributaries, with the bowl-shaped coastal plain rising abruptly into mountainous uplands deeply dissected by fast flowing rivers and rising up to an elevation of almost 900 meters (Figure 13.3). At the time of European contact in the mid-sixteenth century, early encounters with Spaniards indicate that a large coastal town of "Tanay," with several *datu*(s) ("chiefs") known to high-ranked chiefs on the neighboring island of Cebu, was visited by the Miguel de Legaspi expedition at some time in late 1565 or 1566 in search of rice and other supplies needed for a reconnaissance journey in the region (Junker 1998). However, the Spaniards were met with hostility and several killed, the brief Spanish account at least suggesting that a coastal center with a *Visayan*-speaking population and with significant military resources existed at the mouth of the Tanjay River at this time. The Tanjay region interior and upland areas to the north and south are known in eighteenth-century texts and through late nineteenth- and early twentieth-century ethnographies



13.3. Topographic map of the Tanjay region, showing excavated sites and surface sites one hectare or larger in size dated to the two most recent general chronological periods (the eleventh–fourteenth centuries Santiago Phase and the fifteenth- to early sixteenth-century Osmena Phase). Also shown is the most likely location of various ethnic/linguistic groups of the Tanjay region between around the fifteenth century and the mid-twentieth century (with representations of these groups at right). Finally, the map also has a list of foreign imports and local exports to foreign ports tied to the Chinese and Southeast Asian luxury goods trade (known from Chinese trade records), products likely produced in the Tanjay uplands and lowlands (based on historical records, ethnographic accounts, and archaeological evidence), and probable trade routes in the region that moved these foreign and domestic goods.

to have been occupied by small-scale swidden-farming groups known as *Bukidnon* or *Magahat*[1] arranged over the landscape into scattered impermanent hamlets. Foraging populations known as *Ata* or *Aeta*[2] had impermanent settlements in the upland forested areas and moved frequently over the this landscape, as well as into the lowland margins, to pursue a variety of seasonally abundant resources and opportunities to trade with both Bukidnon/Magahat groups and downriver lowland peoples (Junker 1996, 2001b, 2002).

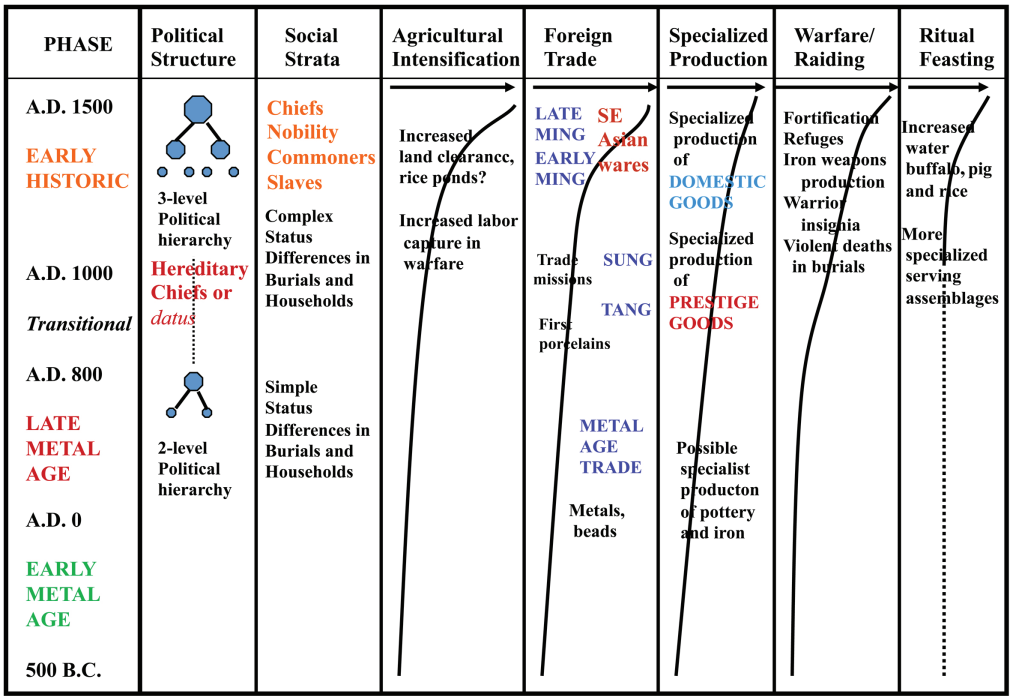
During the several decades of the Tanjay Project, both probability-based random sampling strategies (to develop predictive statistics for settlement types, densities, and relationship to landscape features) and 100 percent contiguous block surveys (to examine the spatial distributions of sites and site features relative to one another in different periods and ecological zones) were conducted. The resulting regional survey database includes more than 350 sites spanning

six cultural phases that date between the early second millennium BC and the colonial/recent period (Junker 1990, 1999a). The archaeological analyses discussed here primarily focus on the Santiago Phase (ca. AD 1100–1400), and the Osmena Phase (ca. AD 1400–1565). In addition to the regional surface surveys, thirteen sites in varying ecological and elevation zones, of diverse sizes and probable periods, and representing a variety of human activities within the Tanjay natural and social landscapes, were excavated – including the large coastal center of Tanjay (to be described in the following text), several upriver "secondary centers" (with habitation features, some evidence for specialized production such as iron manufacture, and exotic prestige goods), a number of smaller lowland villages emphasizing coastal fishing and/or agricultural production, a probable swidden-farming hamlet at around 500 meters, and a probable forager camp with evidence for interior-coastal trade in the ecotone between the upland and lowland (see Figure 13.3 for locations).

A comprehensive regional-scale geoarchaeological study in the Tanjay region focused on landscape features, ecological systems in upland and lowland zones, changing fluvial dynamics in the Tanjay River system, coastline changes, human modifications associated with agriculture (e.g., construction of wet rice ponds), and human impacts on the environment (e.g., land clearance, erosion, and siltation of the river mouth) (Green 2010). Macrobotanical studies of archaeological plant remains (Gunn 1997) and faunal materials (Junker, Mudar, and Schwaller 1994; Mudar 1997) have complemented the geoarchaeological work in identifying the specialization in the exploitation of different resources in the region and how strategies of subsistence and trade food use modified the landscape and impacted social interactions in the region (see also Junker and Niziolek 2009). Numerous seasons of excavation at the coastal port of Tanjay and several secondary upriver centers yielded not only pile house habitations, with features associated with cooking, trash disposal, feasting activities, and craft-production areas (including possible earthenware ceramic production locales, as well as iron slag and tools from likely iron manufacture) (Junker 1999a: 152–158), but also sixteen burials containing the remains of a total of nearly thirty individuals within the settlement of Tanjay, the majority of which were individual inhumation burials dated to between the fourteenth and early sixteenth centuries and placed directly next to, or under, what appear to be contemporaneously occupied pile houses. The most startling find was a fifteenth-century "massacre" burial with nine individuals, some with clear forensic evidence for violent deaths and buried with several decapitated heads, likely the heads of enemies taken in revenge raids (Junker 1999a: 362–365). Adjacent to this mass burial was a male "warrior-burial" with filed and gold-pegged teeth and a boar's tooth necklace or pendant, accompanied by bronze and iron weapons, high-quality porcelain pieces, and two decapitated heads (Junker 1999b).

Archaeological investigations in the Tanjay region suggest that the polity of Tanjay, like a significant number of other Philippine polities known primarily through historical sources, expanded in scale and complexity in the fifteenth and sixteenth centuries in conjunction with the growing reliance on trade in foreign prestige goods (Junker 1990, 1999a). The emergence of a three-tiered settlement hierarchy, and a larger and more complexly organized coastal center, was accompanied by a number of changes reflected in the archaeological record. In terms of social stratification, escalating status competition and wealth circulation can be observed in the increased qualitative and quantitative differentials in both locally produced and foreign prestige goods within excavated households and burials (Junker 1994b, 1999a: 152–158; Junker et al. 1994). While there is evidence of trash pits with "high-status" feasting food remains (pig and water buffalo concentrations) associated with broken and discarded porcelain and earthenware feasting assemblages as early as the twelfth century, these practices seem to expand in scale and social inclusiveness by the fifteenth to sixteenth century (Junker 2001a; Junker and Niziolek 2009). As the coastal center of Tanjay grew in the early to mid-second millennium AD, archaeological evidence for greater standardization in both mundane and fancy earthenware suggests the emergence of centrally administered craft production in both local luxury products and everyday wares (Junker 1994a, 1999a: 261–291; Niziolek 2013). At the same time, geoarchaeological, zooarchaeological, and botanical studies point to the expansion of agriculture through intensified deforestation for swidden farming and the potential establishment of coastal wet rice ponds (Green 2010; Gunn 1997; Mudar 1997), while settlement studies indicate the possible influx of labor through population increases, migration, or slave capture (Junker 2005, 2008). Expanded river-based trade networks between interior swidden-farming and foraging populations and populations incorporated into the lowland chiefdom are documented by greater quantities of metal, ceramics, beads, and shell flowing upriver into the upland settlements of these groups (Junker 2001b, 2002). Finally, increased indicators of conflict (fortifications, increased metals production, warrior burial insignia, and violent deaths in burials) can be identified between Tanjay and rival maritime trading polities and/or the region's interior tribal swiddeners and forager populations by the fifteenth- and sixteenth-century height of foreign trade (Junker 1999a: 336–369). A very schematic summary of the general trends seen in political complexity, social dynamics, and the political economy is presented in Figure 13.4.

In this chapter, I focus on three specific examples of archaeological research in the Tanjay region that illustrate the significance of a multiscalar approach in archaeological analysis – working from interregional comparisons, to a single region, to individual settlements, and, finally, to households within individual settlements – in trying to understand how individuals and groups along



13.4. Trajectories of change in the Tanjay region, as evidenced through archaeological data.

intersecting exchange chains and networks of social interaction may have viewed these interactions through differing cultural lenses and with differing political and social agendas. The examples concern (1) foreign porcelain trade and its implications for social status competition and political leverage within the practice of feasting; (2) the social contexts of internal trade between coastal trading polities and their supposed "hinterlands" as products crossing cultural boundaries of social meaning; and (3) the role of women as cultural innovators when they become objects of value themselves in the course of slave raiding and warfare. By looking at these specific examples, with not only attention to multiple scales of analysis but also by emphasizing multivocal historical accounts and diverse forms of archaeological data, as well as broadening the scope of "trade" to include less materially evident forms of cultural exchange and what might be termed "negative" encounters (warfare and slave raiding) as mechanisms of social transmittal, I hope to provide a more dynamic portrait of what shaped these Philippine societies of the tenth through sixteenth centuries.

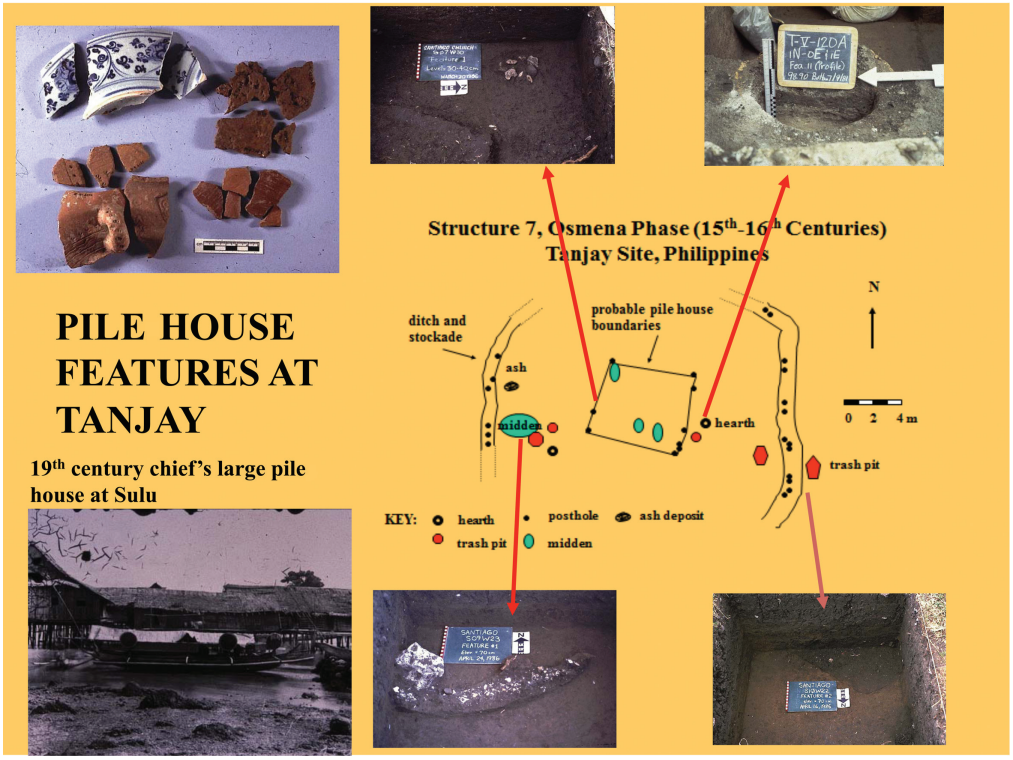
Foreign Trade, Feasting, and Social Display at the Chiefly Center of Tanjay

The most extensive excavations were carried out at Tanjay, where a large-scale coring and test excavation program revealed a coastal center that was occupied initially around the mid-first millennium AD as a relatively modest

three hectare settlement, expanded to seven to ten hectares by the twelfth- to thirteenth-century Santiago Phase, and then grew rapidly by the beginning of the fifteenth century to a more than thirty hectare sprawl of pile houses, burials, and areas likely used for ceramic and metals production. Extensive excavations were carried out in two residential areas in the chiefly center of Tanjay, revealing features of pile houses including trash and midden deposits where the remnants of feasting activities were found (particularly different types of serving assemblages, animal bone, and plant materials). The complex patterns of porcelain consumption in these archaeological contexts illustrate that the rigid "status hierarchies" and strong political power disparities between "elites" and "nonelites" described in Spanish texts from the period of contact do not adequately describe what was likely a more nuanced and dynamic system of social competition involving acquisition and public-use strategies by individuals and groups that were designed to further their social ascendancy and political aims. Within this "small world" or "microscale" of a community, foreign trade objects gain local social and cultural meanings and fuel parochial politics that are in many ways unconnected to the intentions, desires, and egocentric perspectives of Chinese and other foreign traders who articulated the view of themselves as the prime power brokers in these exchanges.

Historic sources and more recent nineteenth- and early twentieth-century ethnographic descriptions of extant Philippine chiefdoms such as the Bagabo, Magindanao, and Sulu note that houses belonging to chiefs and other elites are simply larger and architecturally more elaborate versions of the wood and bamboo pile houses occupied by the larger population of these polities; however, they often had large walled or fenced house yards and interiors furnished elaborately with imported porcelain, silks, fine cotton textiles, fancy weaponry, metal gongs, and other exotic status goods (Cole 1913; Spoehr 1973). At Tanjay, extensive excavations of posthole patterns in two areas of occupation approximately 200 meters apart, revealed significantly larger houses built on more substantial sized posts with a clear ditch-and-stockade surrounding the house yards in one of the areas of the site known as Santiago Church, a pattern of differential architecture that was the same in both the earlier pre-fifteenth-century (Sung, Yuan, and earliest Ming) porcelain trade period and the fifteenth- to sixteenth-century Late Ming period and height of foreign trade (Figure 13.5, Table 13.2). Smaller pile houses with no clear demarcation of the house yards were characteristic of what might be interpreted as a "nonelite" habitation zone (Junker et al. 1994).

Trash pits, midden areas, and general scatters of debris within the house yards were compared with each other in terms of the densities of foreign trade goods (largely porcelain, but also small quantities of glass and stone beads, ivory objects, and fragments of bronze jewelry) and probable locally made items (iron implements, decorated and/or slipped "fancy" earthenware) that might



13.5. Excavated pile house features (including hearths, postholes outlining the raised pile house, trash pits, middens with significant amount of shell, animal bone and other debris, and ditch-and-stockade features) associated with a pile house dated to the late fifteenth to early sixteenth century and located in what is likely the "elite" sector of the coastal chiefly center of Tanjay. Shown are artifacts associated with the pile-house features (upper left), an extremely large late-nineteenth-century pile house of a paramount Tausug (Sulu polity) chief (datu) in which were housed his multiple wives, children, and retainers (Worcester Photographic Collection, University of Michigan [lower left]), and photographs of an excavated posthole, hearth, trash pit, and shell midden (connected to the features by red arrows).

be considered at least "valuables" if not the "prestige goods" cited as such in early Chinese texts and trade manifests. Quantitative analysis showed that the larger pile houses contained substantially greater quantities of these foreign and local "luxury" goods, differentials that were highly statistically significant in the period of occupation during the fifteenth to sixteenth centuries (Table 13.2) (Junker et al. 1994). Too few pre-fifteenth-century pile houses were excavated to support similar quantitative analysis, although comparison of collective densities (without assignment to specific houses) indicated similarly differentiated distributions in the two occupation zones (Junker 1999a: 157–158), suggesting that "wealth" distinctions in residential zones at Tanjay predate the fifteenth century. Alexander Spoehr's (1973) excavations of historically known late-eighteenth-century and nineteenth-century chiefs' (*datu*) houses associated with the Sulu polity capital at Jolo also showed a correlation between

TABLE 13.2 *Comparisons of Pile-House Sizes and Densities (g/m³) of Likely Prestige Goods and Plain Earthenware Associated with Pile Houses in the Osmena Park Residential Zone and Santiago Church Residential Zone of Tanjay in the Fifteenth to Sixteenth Centuries, Using Analysis of Variance*

For complete statistical analyses, see Junker et al. (1994).

Residential Zones and Structures	Porcelain	Red-Slipped Earthenware	Decorated Earthenware	Metal	Plain Earthenware	Estimated House Size
OSMENA PARK						
Structure #3	88.5 gm/m3	1.9 gm/m3	27.8 gm/m3	34.1 gm/m3	862.1 gm/m3	379 m2
Structure #4	163.9	4.1	20.8	54.2	1166.7	245
Structure #5	98.6	0.0	20.9	87.1	827.5	238
SANTIAGO CHURCH						
Structure #7	302.3	49.0	46.0	904.1	2003.9	541
Structure #8	345.2	26.7	39.0	460.4	1737.2	459
Structure #9	405.7	24.4	33.3	588.4	1041.3	685
	*sig. .01	* sig. .01	* sig. .05	*sig. .001	No sig.	*sig. .05

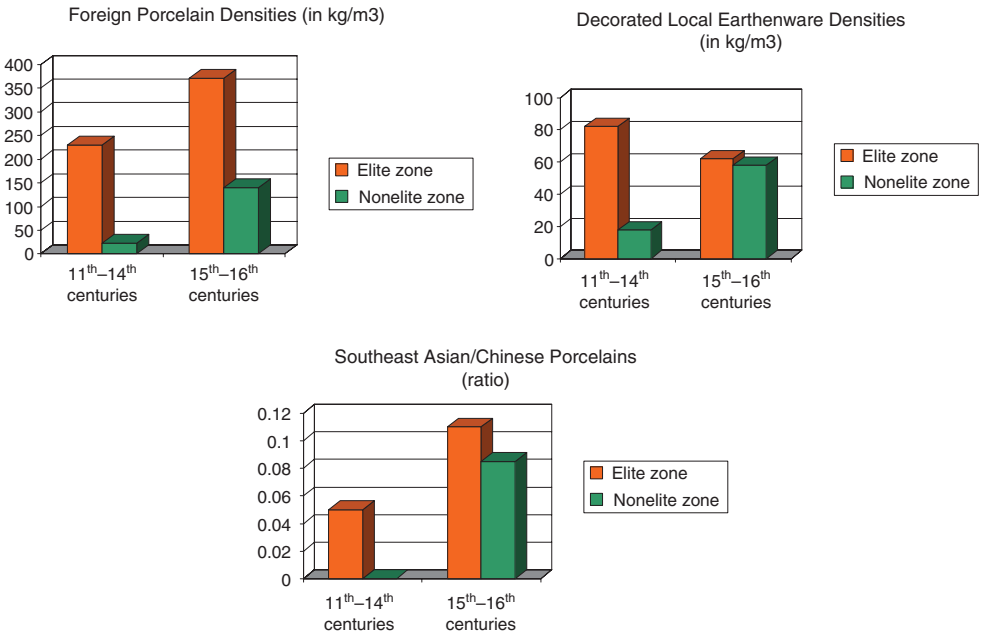
house sizes and both the variety and quantity of "prestige goods" from local and exotic sources (see Junker 1999a: 163). Early Chinese and Spanish texts, as well as in later ethnographic recordings of unconquered polities during the colonial period, indicate that porcelain, the best preserved and most ubiquitous of these prestige goods, functioned in Philippine societies in various social contexts associated with negotiating status and building political coalitions. These contexts include display of fine serving pieces in socially competitive feasts, the gifting of porcelain assemblages in creating strategic alliances through marriage, everyday household displays of porcelain and other exotics as evidence of social rank and chiefly authority, and the use of the porcelain to redress injuries or establish peace pacts in warfare (Junker 1999a: 292–303).

Many of these samples of broken and discarded household goods were obtained from excavated "trash pits," some of which appear to represent individual events of ritual feasting, similar to the ubiquitous feasting events described voluminously in early Spanish writings and in ethnographic accounts of unconquered nineteenth- and early-twentieth-century Philippine chiefdoms in the southern Philippines. These feasts were held in the context of life-crisis events and calendrical rituals where individual and kin-group status was negotiated and displayed through lavish banquets. These feasts featured pig, water buffalo, seafood delicacies, rice (rather than the more common daily

tuber diet), and other high-quality foods ideally served on imported porcelain serving assemblages; oratorical performances emphasizing individuals and households of both status and prowess; and socially symbolic gestures (e.g., exclusionary seating arrangements, food offerings, and ritual participation) that often resulted in overt and violent contestations of perceived rank (Junker 2001a; Junker and Niziolek 2009). Detailed historical analysis of feasting among the Bukidnon,[3] Bagabo, and Magindanao of interior Mindanao (Beckett 1982; Biernatzki 1985; Cole 1913: 111–120; Manuel 1971: 196–197, 229–230) suggests that recognized *datu* and would-be elites sponsored the most elaborate feasts with the largest number of attendees, reflected in the ostentation of the porcelain and fancy earthenware serving assemblages; the range and quantities of food delicacies; and the complexities of what might be called the "feasting histories" of individuals and their allies that could ultimately end in conflicts at the feast if there were perceived social slights.

As noted previously, in both the pre-fifteenth-century and the fifteenth- to mid-sixteenth-century house-yard deposits at Tanjay, the large pile houses in the Santiago Church area of the settlement had significantly greater densities of porcelain serving pieces, as well as "higher quality" ceramics, in comparison to the "nonelite" households (Figure 13.6). Zooarchaeological studies of animal bones associated with broken porcelain in the house-yard trash pits and middens revealed the presence of water buffalo only in the supposed high-status Santiago Church residential zone, as well as significantly higher percentages of pig bones among the faunal assemblages in this area (Junker et al. 1994; Mudar 1997). Macrobotanical studies of charred plant materials from cooking hearths in the two residential zones (Gunn 1997) revealed that rice and some medicinal plants often used in ritual were also more commonly found in this area of the settlement in both periods of occupation. However, the differentials in access to Chinese porcelain, Southeast Asian porcelain, and decorated earthenware serving assemblages appear to narrow considerably in the fifteenth and sixteenth centuries, with households outside this supposed elite core obtaining considerable access to all but the most valuable of Chinese porcelains (Figure 13.6), increasing their production and use of ever-more diverse decorated earthenware as these more localized pieces are disappearing from feasting assemblages within the large houses. These trends are matched by animal and plant material in the supposed nonelite households, which continues to show greater access to "high-value" feasting foods such pig, water buffalo, and rice in the later period, but a contracting gap between supposed "elite" and "nonelite" household access to more valuable and exotic feasting foods (Junker 2001a; Junker and Nizolek 2009; Junker et al. 1994).

A recent porcelain sourcing study by Dennison (2013) illustrates that social manipulation of material symbols of status and power is a complex process that is not simplistically translated into clearly delineated "haves" and "have-nots,"



13.6. Use of variously valued Chinese porcelain, Southeast Asian porcelain, and locally made fine decorated earthenware serving pieces recovered from the "elite" and "nonelite" residential zones at Tanjay in two periods, showing (1) a general increase in feasting wares over time; (2) differential access of to "high-quality" Chinese wares and secondarily to Southeast Asian wares by occupants of the "elite" zone; however (3) more participation of "nonelite" in feasting ware acquisition of all types over time.

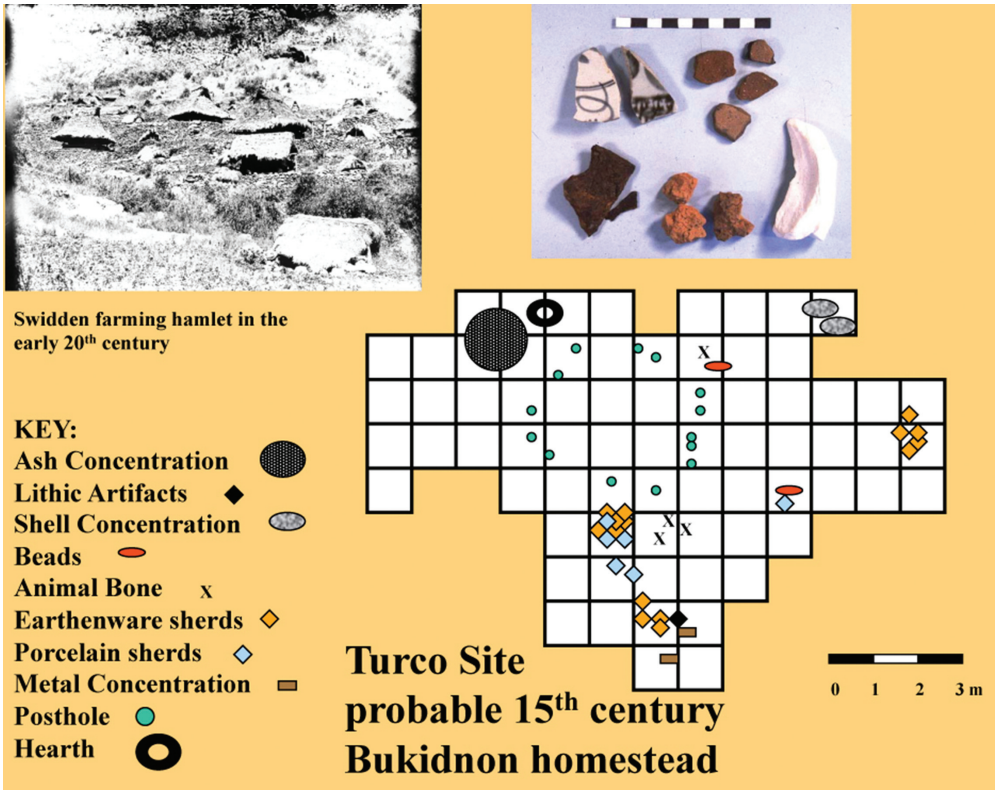
with the latter dependent on the former for access to the tools for building social and political capital. Attempts at elite exclusivity of access to materializations of rank and authority appear to be continually undermined by the simultaneous strategies of those outside high-status circles to obtain material goods that will allow them to both emulate and transform the social contexts of competitive alliance formation (such as feasting, marriage, and warfare), creating the rapidly shifting power hierarchies characteristic of historically recorded Philippine chiefdoms. Using LA-ICP-MS[4] to compare the clay chemistry of porcelain in the two "residential zones" for both of the two phases of porcelain trade at Tanjay, Dennison found that the generally poorer-quality porcelain in the "nonelite" zone originated from diverse multiple sources that included Southeast Asia (likely Vietnamese) wares beginning in the fifteenth century, while the Santiago Church porcelain was not only high quality but also from a very homogeneous source that was exclusive to this area of the settlement.

While Dennison's work is still in progress and will include additional samples, the preliminary interpretation is that chiefly elites at these centers can maintain exclusive access to certain high-quality porcelain through their control of trade ports and interelite exchange, but nonelites can access lower-quality serving pieces in several ways, for instance, through elite largesse in

passing along less coveted items as they build their alliances, creating their own exchange networks outside elite control, or manufacturing their own status wares (in the case of earthenware replicas). The evidence suggests that elite emulation may be driving this adoption of various feasting paraphernalia, but also that a wide number of households are not just obtaining access to these items through controlled elite channels, but are likely contesting elite exclusivity in trade access by focusing on non-Chinese pieces and locally created earthenware valuables.

A Regional Perspective: Coastal-Interior Trade and Culturally Constructed Value

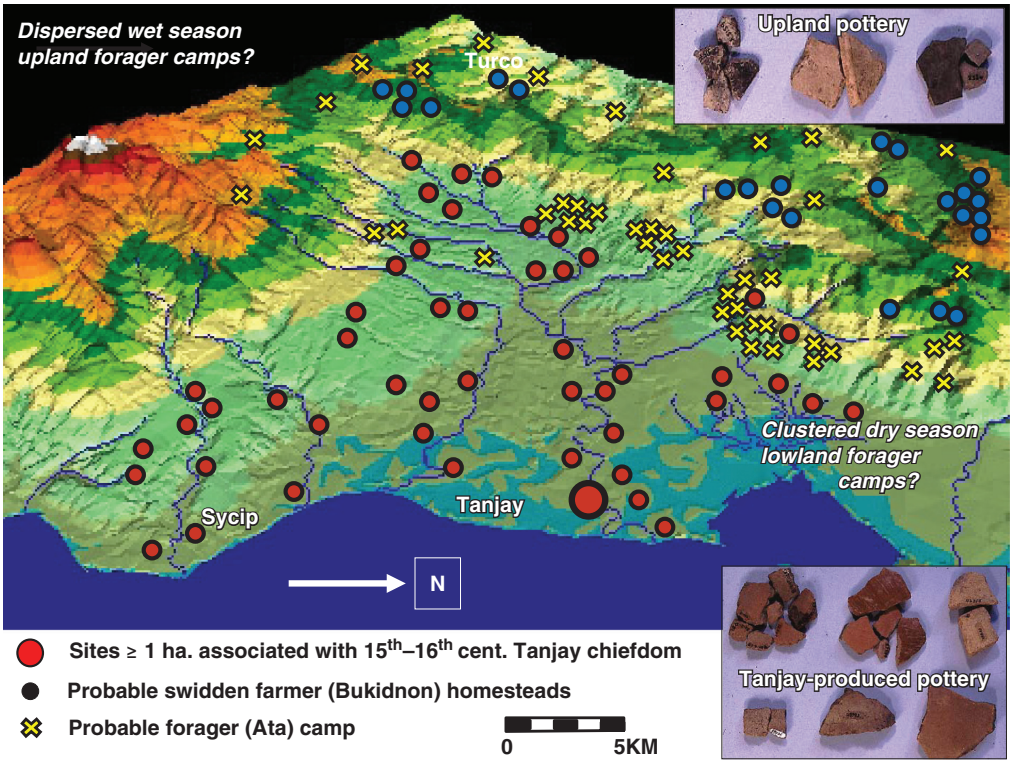
Even if lowland patterns of political alliance and domination are not exactly as we would have supposed within a strictly hierarchical model of chiefly authoritarianism, surely lowland populations outside the polity center and the smaller-scale interior societies would be under political dominion and coerced trade by militarily superior coastal chiefs who also often controlled exotic ritual paraphernalia and knowledge. Both historical sources and archaeological evidence from sites in the Tanjay region appear to contradict this view and to paint a more complicated picture of negotiation and strategic manipulation that indicates a great deal of fluidity, as well as likely individual and corporate agency, among all the groups involved in these intertwined exchange networks. Chinese descriptions as early as the thirteenth century (Scott 1984),[5] Spanish contact documents (Junker 1999a: 242–246), and ethnohistorical works on individual polities and their trade partners, such as the Magindanao-Tiruray-Manuvu trade (e.g., Manuel 1971: 218–219, 343–344; Schlegel 1979: 105–109), clearly identify small-scale interior swidden-farming societies and foragers as the primary sources of the exports needed by the lowland traders, while emphasizing that these are not one-sided relationships of coercion and that they correspond to similar historical observations about these interethnic regional trade relations in other regions of Island Southeast Asia (e.g., Gullick 1958: 125–127; Miksic 1984). As noted previously, Chinese trade records providing lists of Chinese export products and import products to a range of Philippine polities (see Table 13.1) indicate that the Chinese both tailored their luxury goods exports to specific polity tastes (see discussion in the following text) and obtained some specialized products, but also many duplicate ones, from various polities. Therefore, individual Philippine polities had to compete for favored trade status by demonstrating their ability to secure a diverse range of desirable products at a significant scale to meet foreign trader demands, and this meant that they could not afford to cut off their source of these products by harsh demands or lack of material incentives (such as porcelain, metal weapons, foreign beads) and nonmaterial incentives



13.7. One of three structures excavated at the fifteenth- to sixteenth-century Turco site at around 500 meters elevation in the Tanjay region.

(such as lowland political titles and ritual knowledge) for interior populations (see Junker 1999a: 241–242 and Junker 2001b for summaries of this literature).

Archaeological work at interior settlements with archaeological signatures indicating occupation by either ancestral Bukidnon swidden farming or as ancestral Ata foraging camps (Figure 13.7), suggests that in fact both groups had significant agency in the extent to which they traded their upland products with the Tanjay polity or with other potential lowland polities who controlled the ceramics, metal goods, shells, and beads they desired. Regional settlement surveys, yielding information on the ecological settings, sizes, and artifact assemblage contents of sites in the interior lowlands and upland zones greater than 100 meters in elevation in the Tanjay region, reveal distinct archaeological signatures for what are likely small hamlets or house clusters of swidden farmers and the relatively ephemeral camps of foragers (Figure 13.8). The larger and denser sites that yielded significantly higher densities of spatially concentrated earthenware, iron objects, animal bone, and foreign trade products (including porcelain, beads, and occasionally bronze) are interpreted as likely associated with the tribal swidden farmers such as (and perhaps ancestral to)



13.8. Spatial relationship of fifteenth- to sixteenth-century lowland village sites, likely upland swidden-farmer villages, and likely forager camps in the Tanjay region. Clustered forager sites on the ecotone between upland and lowland likely represent dry season movements to the interior lowland for forest products trade (see Junker 2001b, 2002). The two chemically distinct ceramics at upland sites are also depicted, with probable derivations from Tanjay and an unknown coastal source on the western side of the island.

the Bukidnon/Magahat found in the region historically and up to the present day. The smaller sites with thin artifact scatters dominated by stone tools and animal bone, along with occasional shell, beads, iron implements, earthenware fragments, and/or worked porcelain sherds (the latter especially on the lowland margins), are likely the archaeological remnants of forager camps. These interpretations are supported by excavations at the Turco site (Figure 13.7) and the presumed forager camp Pa-V-110A located along the lowland margins, with the Turco site having clear evidence for substantial house construction, several houses clustered together, and relatively long-term occupation. Porcelain at the Turco site and other surface-recorded sites in the uplands appear to be similar to the lowland "feasting"-oriented serving assemblages, but are of significantly poorer quality than Chinese and Southeast Asian serving wares and occasional large stoneware jars associated with rice-wine fermentation and communal drinking (Junker and Niziolek 2009). It is likely that the tribal Bukidnon populations in the interior, rather than emphasizing the personal aggrandizement that seems to have been at the center of chiefly feasts in the

coastal region (Junker 2001a), focused on what Brian Hayden (2001) refers to as feasts of community solidarity in which the main goal is creating a sense of communality. Measurements of rice-cooking vessels at the upland Turco site in comparison to lowland contexts for feasting at Tanjay support this view in that the cooking pots are more uniformly sized and generally smaller (Junker and Niziolek 2009).

The possible forager camps have somewhat different assemblages in the scattered sites at high elevations versus those clustered in the ecotone at around 100 meters between the uplands and lowlands, interpreted in earlier publications as representing seasonal movements by foragers to the lowland margins for the purposes of trade, a pattern that is supported by a century of ethnographic work in this region and elsewhere in the Philippines (Junker 2001b, 2002). The fact that foragers constructed a seasonal round of activities that included intermittent and brief settlement near lowland villages suggests that Ata foragers not only obtained lowland products through adjacent upland swidden farmers who functioned as middlemen, but also maintained their own conduits for lowland trade by incorporating settlement moves into their seasonal activities that brought them directly into contact with lowland populations. A higher propensity to selectively trade for portable objects such as exotic beads, shell ornaments, and metal objects with social and, perhaps, ritual meaning indicates that the foragers had different priorities and interests in this lowland trade than the upland agricultural groups. Interestingly, the foraging sites like Pa-V-171A contain porcelain fragments, but many are chipped into artificially triangular shapes that may have been inserted into necklaces as talismans, a practice that is materialized in late-nineteenth-century necklaces from the upland areas of Luzon that are among the collections in the Field Museum in Chicago and photographs of which are found in the Worcester Photographic Collection. These items represent "consumption" of lowland goods like porcelain imbued with new meanings that are relevant to the social "logic" of interior groups. Porcelain talismans might have been passed through a logic of social reciprocity through the males of the community (similar to the Australian aboriginals' endless circulation of greenstone axes coming into the community through foreign trade) without the need to hoard them as aggrandizing symbols of individual status and authority.

The fifteenth- to sixteenth-century site of Turco, a small-scale, semipermanent swidden-farmer hamlet on an upland river-terrace where the remains of several houses were recovered in excavations, yielded what is almost certainly lowland-produced iron and ceramics,[6] exotic porcelain, and glass beads that have been identified as likely derived from Mainland Southeast Asia or India. The natural assumption would be that these materials originated at or near Tanjay and entered the uplands through trade routes moving along the Tanjay River and other river drainages in the region. However, chemical analysis of

the earthenware from the Turco site using LA-ICP-MS by Lisa Niziolek at the Field Museum indicated that a significant component of the earthenware (particularly a very striking buff-colored earthenware with a shiny surface created through the presence of mica inclusions) is neither derived from identified clay sources in the Tanjay lowlands nor does it match the chemical signatures for the fifteenth- to early-sixteenth-century earthenware from Tanjay (Niziolek 2013). However, a very common Tanjay lowland-focused earthenware was also present to some extent at Turco and was consistent with the chemical composition of the ubiquitous "Tanjay Red Ware" that flows out of the coastal center in a distance-density pattern that suggests down-the-line trade from its production center at Tanjay (Junker 1994a, 1999a: 252–253). Some of the shell ornaments and exotic glass beads at Turco and among a small collection of sites in this area were also quite different in design and type in comparison to Tanjay and other sites in the Tanjay region lowlands.

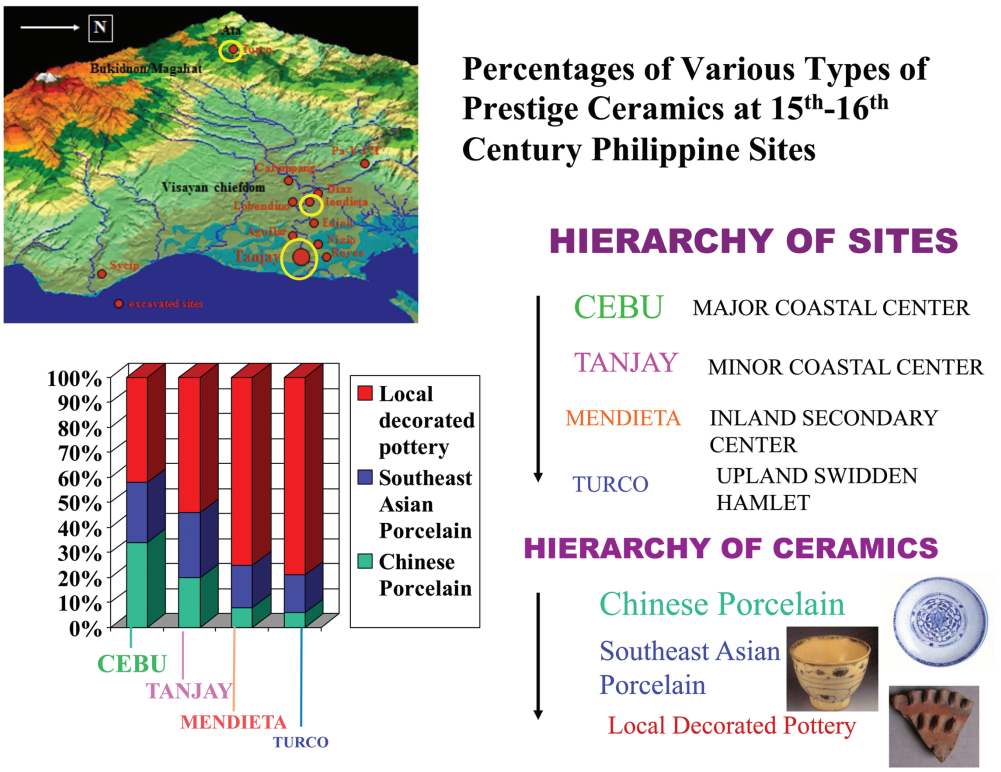
Because it is extremely unlikely that any of these items were manufactured in the uplands at as yet unidentified sites, and these sites are situated in an area that has rivers draining both toward Tanjay and the other side of Negros Island, the most plausible argument is that these upland tribal groups made trade partner choices that were not dictated by coercive Tanjay chiefs and that they could make trade arrangements with other lowland groups (such as those hypothetically occupying the other side of the island, not yet archaeologically documented) or they could engage in down-the-line trade networks and social relations with other upland populations that brought these products indirectly. The export goods required by Tanjay chiefs to participate effectively in the long-distance porcelain trade (see Table 13.1) were nearly all upland forest products that these chiefs did not control directly but required stable trade relationships with interior foragers and tribal swiddener populations, the latter obtaining these export items directly or serving as middlemen traders between lowlanders and deep forest foragers. Therefore, it might be argued that this pattern is evidence for agency in selecting lowland trade partners, and possibly playing one lowland trade partner against another, strongly suggesting that the upland groups were not passively manipulated by the Tanjay polity traders.

The Transmission of Innovation through Slave Raiding

Turning from this more intimate portrait of how both foreign exotics and local goods cemented social relations and were manipulated in various ways as political currency within a circumscribed, multiethnic, regional, and social landscape, the scope is widened to examine sociopolitical interactions at the interregional level within the archipelago. Again, it is important to note that, while archaeological research during the last century at isolated burial

and habitation sites of the eighth to sixteenth centuries has not been devoid of intersite and interregional comparisons, much of this early work was focused on culture historical aims – that is, documenting the evidence for trade in geographically plotted stylistic studies largely without consideration of social motivations of the trading populations. It is only relatively recently that archaeologists working in the region have begun to emphasize the possible social contexts of these long-distance exchanges between likely elites or would-be elites at historically known chiefly centers like Cebu, Manila, Jolo, Cotabato, and at the numerous smaller centers like Tanjay (e.g., Barretto-Tesoro 2008). Chinese and early Spanish texts (which are often not specific about region or polity), as well as more recent nineteenth-century and early-twentieth-century ethnographic accounts of variously scaled postcolonial chiefdoms such as Sulu, Magindanao, Bagabo, and Bukidnon, describe occasions of elite marriages, ritual feasts, and military pacts as occasions when foreign and local valuables were used as material means of political currency to build the alliances key to expanding social status and political authority (see Junker 2003 for a summary). Therefore, an intriguing question is whether larger connections can be teased out between clustered regional interaction grids and interregional power differentials by looking at things such as the quality and quantity of foreign porcelains exchanged between chiefly centers and the mechanisms by which ceramics and other goods moved through the archipelago.

Some quantitative comparisons have been carried out involving "valuations" of porcelain assemblages recovered in archaeological excavations at settlements that, on the basis of size and visibility in the historical record, represent differing levels in the regional and interregional power hierarchies. Ethnohistoric studies and historic references to the use of porcelain in feasting suggest that Philippine chiefs put primacy on the acquisition of Chinese porcelain for serving and display pieces, but supplemented these with poorer-quality Thai and Vietnamese wares and even locally produced "fancy" earthenware that was slipped, burnished, and/or decorated if necessary (see Junker 2001a; Junker and Niziolek 2009). In comparisons of porcelain assemblages excavated in habitation contexts at Cebu (as a significantly larger and more prominent chiefly center on an adjacent island in the fifteenth and sixteenth centuries), Tanjay (as a small and less well-connected polity with fewer historical references), Mendieta (a large "secondary center" upriver from Tanjay that may have been a "bulking center" for controlling upriver trade occupied by lesser elites), and Turco (the previously discussed hamlet likely occupied by upland tribal swidden farmers), the patterns are what one might expect (Figure 13.9). Exotic wares of good quality were increasingly more common in the more prominent lowland centers, tracing a pattern of distribution that, at least initially, resembles politically motivated prestige goods gifting with progressively less access to



13.9. The distribution of ceramic types hierarchized in terms of "relative value" in terms of manufacturing and transport cost, coupled with historically reported valuations. These ceramic valuations appear to be strongly correlated with the hierarchization of settlements in the region in the fifteenth to sixteenth centuries, as reconstructed from archaeological settlement analysis.

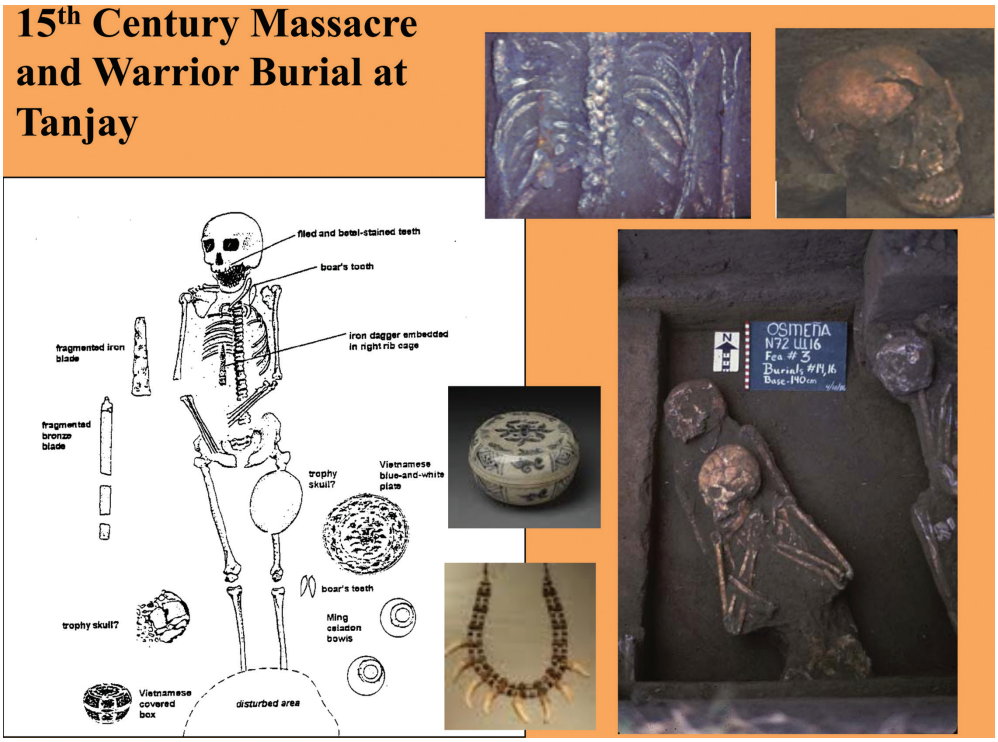
high-quality pieces as one moves further along the social network toward individuals who are of marginal political and social benefit.

If simply the interregional movement of porcelain and other archaeologically visible prestige goods are charted, however, it gives the impression that the largely male crews of elite-sponsored voyages and interior trade expeditions were not only the prime catalysts for moving politically functioning goods, but that they also were key sources for disseminating new technologies, as well as more intangible emblems of "elite" identity (including ideologies, languages, and cosmopolitan knowledge of other "small worlds") within the archipelago. In short, male long-distance traders are often viewed as the sole architects of political economies that involved trade and the propagation of new technologies, symbolically important styles, and ideologies, on this larger scale of analysis. What this view does not consider is the important role of the practice of slave raiding, particularly involving the movement of women, because the women became objects of "wealth" and political clout within chiefly politics, but also the source of bringing innovations to communities.

Chinese records (Scott 1984: 74–75), Spanish contact records (Baumgartner 1977; Mallari 1986), and detailed ethnohistoric accounts of unconquered chiefdoms up through the nineteenth century (e.g., Cole 1913; Kiefer 1972; Warren 2007) are consistent in painting a picture of polities in the eleventh to nineteenth centuries that depended heavily on slave raiding as a source of labor and wealth. The connection between a political economy based heavily on long-distance prestige goods trade and massive-scale slave raiding as a form of labor capture in Southeast Asia can be at least partially understood with reference to demographic, geographic, and ecological factors. Southeast Asia in general, and the islands of Southeast Asia in particular, has remarkably low population densities for a region of complex societal development that, combined with a fragmented island geography and abundance of rich agricultural land, meant that control of people, rather than land or capital, was key to political power (Junker 2005; Reid 1993; Wolters 1999). Polities were defined in terms of the numbers of people a leader could extract resources and labor from, and political coalitions were largely held together through political largesse rather than control of territory (Hall 1992; Junker 2003; Reid 1983) cemented further through the ceremonialism of what Geertz and others refer to as a "theatre state" (Geertz 1980; Tambiah 1976). As shown in Figure 13.1, slave raiding and trade voyages were almost always intertwined in the pre-Hispanic Philippines, with the same seasonal periodicity and raiding routes that stretched well beyond the archipelago. Slave taking was so pervasive that some polities like Sulu obtained 50 percent of their labor from foreign captives incorporated into their multiethnic polity and women, in particular, were a large component of this captive population (Warren 2007). It should also be noted that captives taken in raids or debt-bonded[7] from within the local community, and female captives in particular, were valued prestige objects and a commodity of the political economy. Spanish contact period documents report that chiefs had hundreds and, in some cases, thousands of slaves under their control. Slaves were forms of political capital in both material and ideological terms, and transfers of slaves routinely occurred as part of alliance-building "gift" transactions, such as bride-price offered on the occasion of strategic elite marriages (Junker 1999a: 131–137). The author has argued elsewhere (Junker 2005, 2008) that the need for "labor capture" or "labor redistribution" was an important mechanism favoring large-scale slave taking, that the form of slavery may be described as "open" (in which foreigners are rapidly integrated into the host society) (Scott 1983), and that the result was the transfer of technologies, languages, and ideological components on a massive scale.

In the Tanjay region, there is abundant evidence in the archaeological record for escalating violence and defensive tactics by the fifteenth-century height of foreign trade, including the first construction of a defensive fortification facing the sea, and a more than tenfold increase in the evidence for metals production

at both the chiefly center of Tanjay and the large settlement of Calumpang about 8 km upriver (near a known iron source). Even more dramatic is the first evidence for violence in burials, including a "massacre burial" with multiple individuals, skeletal trauma on a number of the victims, and decapitated skulls, as well as a male "warrior-burial" with an iron blade in his ribs and the emblems of prowess mentioned in Spanish contact period texts (filed and gold-pegged teeth, ornaments incorporating boar's teeth, bronze and iron weaponry, and high-quality porcelain boxes and jars) (Junker 1999a: 336–399; 2008) (Figure 13.10). Although there are no clear indications whether this assault involved targeted slave raids or other types of conflict, the injuries indicate that the Tanjay population were the victims of unknown aggressors. If consistent with historical accounts of maritime raids, Tanjay was likely the target of larger and more aggressive polities such those of northern Mindanao (Sulu and Magindanao) and possibly nearby Cebu. Women are known through ethnographic work and historical accounts as the primary earthenware potters in pre-Hispanic and

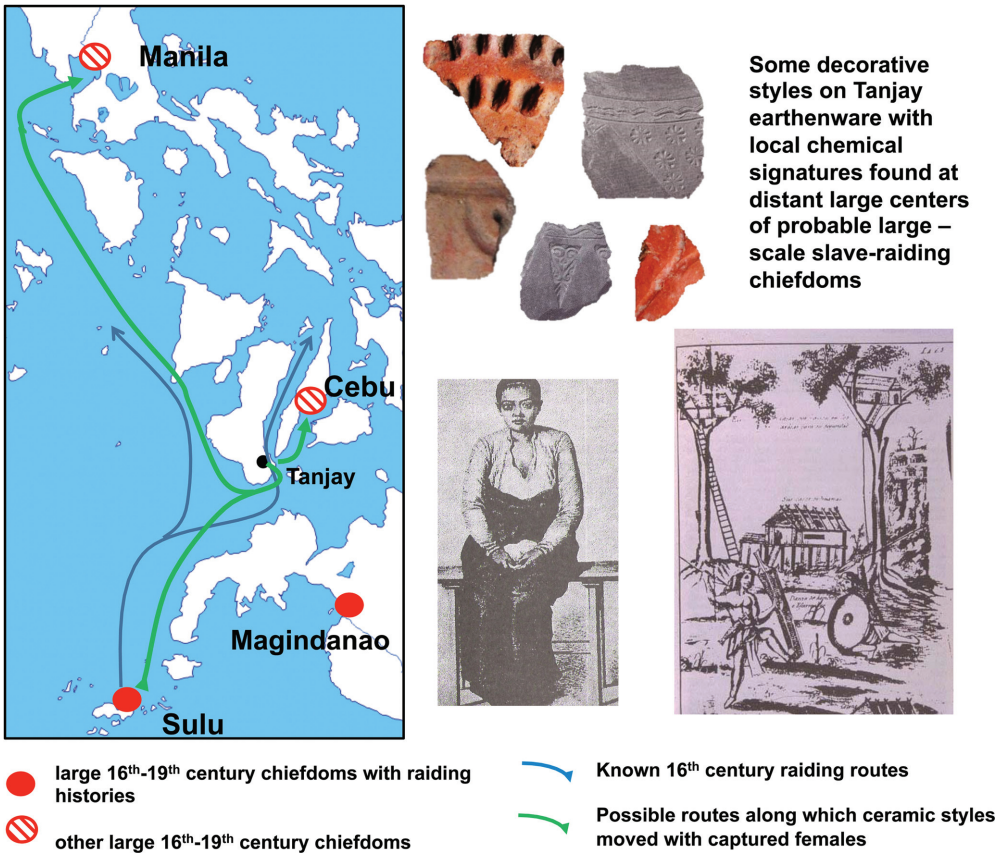


13.10. Fifteenth-century "warrior" burial at Tanjay (left), with an iron blade in his ribs, gold-pegged teeth, boar's teeth, Chinese and Vietnamese porcelain, and two "trophy" skulls, with a photograph of an early-twentieth-century boar's tooth necklace (in the Field Museum of Natural History Collections). Stratigraphically contemporaneous "massacre" burial (upper and lower right) with males, females, and children laid out in likely family groups, some with traumatic injuries (see frontal cranial injury consistent with historic period "head-axe" wounds).

contact period Philippine societies (Junker 2008: 124), as well as the more frequent victims and captives of these type of raids (Junker 1999a: 122–123; Warren 2007: 227), less likely to escape captivity (Junker 1999a: 123), and generally incorporated rapidly into the captor population (Reid 1983: 25–27). Spanish contact period documents indicate that female captives most often became primary or secondary wives to indigenous men, they remained in the captor community, and children born to them in the captor community did not necessarily retain the slave status of their mothers (Scott 1983).

Therefore, earthenware design elements can be examined to see if, in fact, designs and not the ceramics are moving from small polities to large polities within the archipelago, and particularly if the overall diversity of decorative designs is increasing with an escalation of slave raiding as a means of transporting women and their knowledge through the archipelago. Recent work on the design elements on "fancy" earthenware pottery at Tanjay and other Philippines sites shows a considerable increase in the overall variety of decorative design elements in the fifteenth- to early-sixteenth-century assemblages and that many of the design elements were widespread within the archipelago in comparison to earlier periods. In addition, compositional analyses by UIC and Field Museum archaeologists Lisa Niziolek and Matt Piscatelli using LA-ICPMS determined that the majority of these fancy earthenware motifs found at Tanjay were manufactured at Tanjay from local clays, and that when they were found at other polity centers with assemblages compared in the sample (Cebu, Manila, and Sulu), they were found in significantly less abundance at these major centers (Figure 13.11).

While it is tempting to suggest that the design elements spread from the large-scale polities to less significant ones like Tanjay through trade voyages, a more plausible explanation is that slave raiding was ubiquitous in this period to cover labor shortages in farming and craft production, women were the majority of the captives, and women were the potters and design innovators. Therefore, innovations in ceramic design and technology were more likely to flow toward the most active slave-raiding polities, like Sulu, which was strongly dependent on agricultural labor from slaves (Kiefer 1972; Warren 2007), but quickly integrated these women into the community where they became ethnically transformed into the Sulu Tausug and where they were likely significant agents of change. Like the archaeologically visible ceramic styles, the incredible permeability of social and cultural enclaves within the Philippines and the rapid pace of innovation through trade, exogamous marriages, and the often-forced transport of women are evidenced in the extreme multilingualism in the Philippines (Andaya 1992: 405). Of an estimated 200 or more languages in the early sixteenth century, sixty-seven languages are still extant in the twenty-first century, and most Filipinos speak at least three or more languages now as in the historic past, reflecting in large part the cultural tutelage of exogenous



13.11. Location of Philippine polities with decorated earthenware ceramics included in the interregional stylistic and chemical analyses, with known and possible sixteenth-century slave-raiding routes. Drawing of female slave of unknown origin (1830, Philippine National Archives) (bottom center) and a battle between Visayan and unknown Mindanao warriors from Francisco Alcina's 1688 Historia de las islas indios de las Bisayas (bottom right).

women who introduced new forms of communication and forms of cultural expression.

Once we examine the contexts in which particular objects are created and transported materially or in terms of design elements moving through social networks, in this case through slave raiding as a form of negative interaction, it is clear that interregional relationships are not straightforward cyphers of diffusion from powerful elite-controlled "centers" to passive "peripheries." Male trader-raiders from Philippine polities clearly traveled to far-flung places (such as to the Chinese court on trade missions, to most of the major coasts of eastern Island Southeast Asia and even Mainland Southeast Asia on slave-taking raids, and to serve as mercenary warriors in the courts of major kingdoms like Pegu in Myanmar), where they encountered new vocabularies, Sanskrit-based

writing systems, new religions (such as Buddhism, Hinduism, and Islam), and new technologies (such as Chinese artillery and Islamic style armor). However, the ubiquity of captive labor and its redistribution within and outside of the archipelago, and particularly the significance of transported women and their roles in enculturating children in an alien community, should be considered in an analysis of how trading and raiding are complementary mechanisms for cultural transmission and cultural change.

CONCLUSIONS

In analyses of the role of Island Southeast Asia in the larger sphere of exchange and commerce of the mid-first to mid-second millennia, both historical and archaeological work has tended to emphasize what are perceived as foreign-controlled flows of porcelain into the region at major port towns and cities. There has generally been little interest in the frequently nonliterate, collective "other" along the margins of coastal polities who are often construed as a passive beneficiaries rather than active authors of this trade. Few studies of the circulation of goods in precolonial Southeast Asia have emphasized the local social nexus of exchange in which historically contingent, culturally contingent, and even individualized meanings and power strategies are associated with exotics moving through complex and layered social networks. These social matrices often include local elites and would-be elites looking for new sources of wealth financing, but also incorporate disenfranchised members of communities as well as actors within connected, small-scale, nonstratified societies.

This type of multiscalar analysis of networked social interaction and exchange requires an archaeological approach that operates at the inter-regional, regional, and more intimate local and intrasite levels, particularly emphasizing places in the social landscape where disparate social networks intersect and reveal materialized forms of social friction, adaptation, resistance, resilience, and innovation. In the examples presented here, households at the chiefly center and in expanding upriver communities are seen as aspiring to elite status through amassing their own forms of political currency that might independently attract allies and followers; small-scale upland tribal groups and foragers are seen to leverage their exclusive access to valuable forest products into a form of bidding war between lowland polities anxious to obtain the necessary exports for foreign prestige goods trade; and captive women who, through forced resettlement in new centers, are seen to bring innovative technologies, styles, languages, and ideas that help create the astoundingly polyglot, multiethnic, and culturally diverse social landscape found in the archipelago at the time of European contact.

NOTES

1 *Bukidnon* is a general term used across much of the archipelago to refer to "mountain people" by lowland populations and *Magahat* is a frequent appellation roughly meaning "fierce" or "warlike" people similar given by lowland groups to upland groups with whom they interact. Today, uplanders with a "Bukidnon" ethnic identity (but not "Magahat") persist in the region, although their traditional land use has been threatened particularly severely by logging, immigration by landless lowland families, and eco-tourism plans by local government over the past twenty-five years. I visited a newly built upland tourist resort in 2008 where the Bukidnon were ousted from their lands and hired to work as tour guides, cooks, and maintenance workers at the resort and provided with housing in a "Disney-esque" pilehouse village.

2 The Negros Island *Ata* are similar in social organization and economic strategies to the *Agta* and *Batek* studied more extensively by ethnographers on Luzon and Palawan Island (see Junker 2002 for an overview). In the early 1980s, when the Tanjay project began, many Ata were still engaged in a mobile lifestyle and combined traditional collecting activities with seasonal work for adjacent farmers and downriver trade expeditions. Today, most of the Ata have been assimilated into expanding farming communities or resettled on the Mabini government reservation to the north of the Tanjay region (Smith 2012).

3 In this case, the generic term "Bukidnon" is given to an interior group on Mindanao that is described as a "chiefdom." The term, translated as "mountain people" was often used by outsiders to describe either interior chiefdoms or smaller-scale tribal groups.

4 LA-ICP-MS: Laser-Ablation Inductively-Coupled Plasma Mass Spectrometer.

5 In fact, Chao Ju-kua's *Chu Fan Chi* from AD 1225 describes a Chinese trader likely accompanying a lowland Filipino on an upriver trading trip where he came into contact with what are probably Ata foragers (called *Hai-tan* by the Chinese writer) who exchanged goods (including imported porcelain) but in a clearly somewhat antagonistic manner that suggested wariness by both trade partners and disputes the view that lowland traders had the upper hand in these encounters.

6 We have yet to locate any historical or ethnographic references to iron production or pottery manufacture among the Bukidnon/Magahat on Negros Island, with historical and ethnographic research generally concluding that these goods were traded into the region by lowland producers. Clay sources that might have been used for pottery production seem to be concentrated in the lowland area around Tanjay, while the primary sources of iron are in the upper part of the Tanjay River drainage but below 150 meters, according to a geoarchaeological study of the region (Green 2010).

7 Debt bondage, in addition to capture in raiding, is also reported as a means of social and economic disenfranchisement that allocated individuals and their labor to "slavery" for a prescribed period in some contact period Philippines societies (Junker 1999a: 132–133). However, because these were almost always people from the same community, their relevance to the issue of long-distance transport of people and consequent introduction of new material culture and ideas is less significant.

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FOURTEEN

THE HANSEATIC LEAGUE AS AN ECONOMIC AND SOCIAL PHENOMENON: ARCHAEO-CERAMIC CASE STUDIES IN CULTURAL TRANSFER AND RESISTANCE IN WESTERN AND NORTHERN EUROPE, CIRCA 1250–1550

David Gaimster*

INTRODUCTION

The study of trade and exchange through material culture is central to the disciplines of European medieval and historical archaeology. The rapidly expanding archive of excavated trade commodities of the late medieval to early modern period in Western and Northern Europe forms not only a laboratory for investigating commercial contacts but also for exploring social networks, cultural influences, and ideological interactions on a pan-regional scale. The Hanseatic League of trading towns and ports was a dominant mercantile force on the North Sea and Baltic littoral region between the twelfth and sixteenth centuries, but until recently there has been little attempt to address its archaeological legacy. Amongst archaeologists, interest is accelerating both in the trading mechanisms of this system and in the cultural signature of trade communities and Diasporas dispersed around the region, together with the interaction of these populations with the local community. A parallel historical narrative of the Hansa is beginning to emerge, which shifts the traditional emphasis of research on economic transactions to the study of cultural engagements together with ideological and technological transfer/resistance. Where they were once almost exclusively regarded as illustrative evidence for

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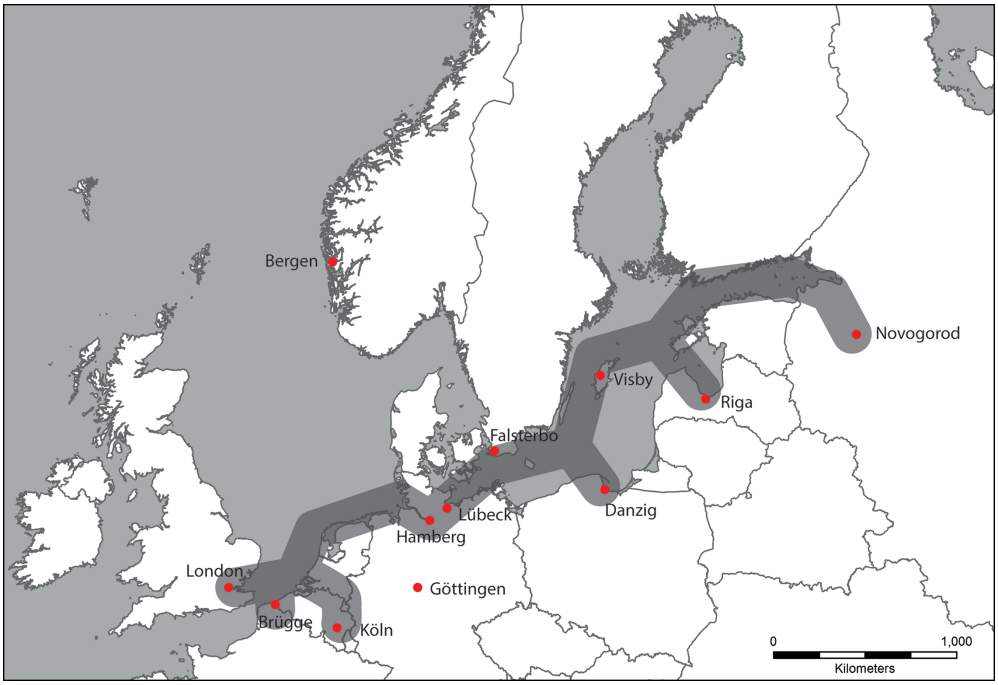
long-distance commercial activity, domestic artifacts, such as table and heating ceramics, are now subject to scrutiny as active media for social, cultural, ethnic, and confessional relationships and offer both quantitative and deeper interpretative insights into mercantilism and its cultural signature. The archaeology of the Hansa now intersects with wider debates about Europeanization and proto-globalization during the late Middle Ages arising from growth in long-distance commodity trading.

THE HANSA IN THE NORTH SEA AND BALTIC: COMMERCIAL AND CULTURAL NETWORKS

The Hansa formed the principal agent of trade and exchange in Northern Europe and the Baltic in the medieval to early modern period. The origin of this confederation of German cities can be traced back to the foundation of Lübeck in 1159. During the following century, partly in the wake of conquest by the Teutonic Order, German merchants rapidly colonized the lands to the east and founded such towns as Rostock, Stralsund, Danzig, and Riga. The influx of settlers lured by new markets and trading privileges enabled German traders to tap and, within a short time, to dominate long-distance trade.

Despite their dispersed geographical position, a new type of ship, the cog, which developed around 1200, enabled the Hanseatic merchants to maintain economic superiority over the continent for centuries. It was more capacious and more stable than previous models and, at around 200 to 300 tons, could carry two to three times the cargo. Hanseatic trade reached its zenith in the fourteenth to fifteenth centuries with the foundation of permanent trading posts, or *Kontore*, at Novgorod in the east, Bergen in the north, and London and Bruges in the west. Together, they formed a dynamic commercial and cultural network, which stretched the length and breadth of Europe and beyond (Figure 14.1). Raw materials were exchanged from the east and finished/semi-finished products from the west, stimulating the wider long-distance market (Dollinger 1970; Hammel-Kiesow and Puhle 2009).

The transportation of raw and processed material and finished goods inevitably also necessitated the movement of people. In addition to traders, wholesalers, and retailers, members of the aristocracy, administrators, crusaders, churchmen, and craftsmen – shipbuilders, altarpiece-carvers and potters – were prepared to migrate long distances, with the prospect of exploiting new markets for their products. Thus, the social and cultural networks, which developed between trading partners, towns, and family members the length and breadth of the North Sea and Baltic regions, were perhaps as influential as the market forces that enabled the economic and technological dominance of the Hanseatic League (Gaimster 2005, 2007; Verhaeghe 1998).



14.1. Map showing the Hanseatic trading system in the late Middle Ages connecting the North Sea and Baltic Sea Zones (source: Wikipedia Commons).

Hanseatic merchants who settled in overseas ports created diaspora communities, forging translocational cultural practices, whereby familiar identities, allegiances, and material culture heritage were transferred and embedded in the place of residence (Curtin 1984; Naum 2013). German traders settled the southern Swedish coastal port of Kalmar from the mid-twelfth century, and German speakers dominated the burgher group between the late thirteenth and early fifteenth centuries. While they invested commercially and socially in the town by participating fully in public life, they also took care to preserve close cultural and kinship ties with partners and family in Lübeck, Rostock, and Stralsund. This translocational lifestyle was reflected in frequent return business trips and family exchanges, maintaining homes on both sides of the Baltic Sea and engagement with host communities through financial investment, religious donation, and diplomatic service. Merchants based in or visiting Kalmar brought not only salt, cloth, hopped beer, wine, and spices, they also brought their domestic tableware, metal cauldrons, pewter spoons, silver jewelry, and other household products. This array of things, routinely employed by the Hanseatic burghers in the conduct of daily life, enabled the German-speaking mercantile diaspora, either in Kalmar, Bergen, or in London, to transplant the urban domestic lifestyle of its "Heimat," and to invest in social competition both within and beyond the translocal community.

Hanseatic urban settlements in Northern Europe shared many things in common, not only in their commercial function, but also in their language and their social, political, and religious identity, and cultural expression. Art historians have spoken in defining terms of a metropolitan Hanseatic "signature" that was articulated materially through a shared vocabulary of town plan, public buildings, church layout (designed as much for business meetings as for the veneration of the saints), a distinctive architectural style of step-gabled buildings (*Backsteingotik*), and common design in the visual arts, particularly in the ecclesiastical and devotional spheres (Jaacks 1989; Zaske and Zaske 1986). In the latter area, carved and painted altarpieces endowed by leading merchant families or guilds, carved bench and pew ends, monumental grave slabs, baptismal fonts, and doors in cast bronze all allude to the shared religious and social heritage of the region's urban burgher elite (Hasse 1979). It can be argued that the Hanseatic mercantile network had a profound impact on the development of a distinctive urban materiality around the Baltic and North Sea.

ARCHAEOLOGY OF THE HANSA

The overwhelming bulk of trade during the Middle Ages was in perishable goods or in raw materials that are generally below the figurative archaeological radar. In a survey of 500 years of trade through the port of Hull, 98 to 99 percent of its exports and perhaps as much as 95 percent of its imports fall into this category (Evans 1999). While the excavated sample may be unrepresentative and inadequate for use in the reconstruction of the long-distance bulk commodity trade, its study as an index of changing private consumption and of taste on the microlevel is considerably more valuable. Excavated household goods such as table, kitchen, or heating ceramics, in view of their ubiquitous survival rate, form an effective comparative measure of the extent to which the Hanseatic cultural signature was conserved in the homes of trading communities around the region and penetrated the wider cultural landscape. In view of their short life span and survival in the ground, imported ceramics can be cross-examined as *Kulturträger* in their own right alongside gabled brick architecture and ecclesiastical objects (Gaimster 2005, 2007; Stephan 1996). Pottery and tile assemblages show both commercial and social links between trading communities and may also reflect the process of cultural transfer to the region over time and space. The domestic ceramic evidence forms a comparative measure of the spread and adoption of domestic practice and socially influenced expressions or *habitus*, particularly in the spheres of cooking and dining traditions, heating technology, and interior design.

The redevelopment of town and port infrastructure around the Baltic littoral, in particular since the changes to the regional political infrastructure in 1990–1991, has generated Europe's largest single urban archaeological program

with its own "mountain of finds." Sites and new discoveries have been reported in the publications of biennial colloquia held in Lübeck since 1995 (see review by Evans 2004). Recent public exhibitions and publications on the latest finds of ceramics, glass, metalware, and organic products from the key medieval mercantile centers are helping to redraft the local urban historical narrative. In Rostock more than 10,000 square meters of the historic core were investigated between 1990 and 2000, while Stralsund has witnessed a similarly extensive program of excavation and recording of standing buildings. In Gdańsk (Danzig), work on Granary Island alone has required the excavation of some 5,550 square meters of soil. Monographs and articles have documented additional major programs of urban investigation generating rich, often waterlogged, deposits of urban material culture in Stockholm (Hallerdt 2002); Turku, Finland (Seppänen 2003); Kołobzreg (Kolberg) (Rębkowski 2008); Elbląg (Elbing) (Nawrolska 2008); Riga (Ose 2008); Tallinn (Pärn and Russow 2008); and in Lübeck and the nearby towns of Mecklenburg-Lower Pomerania (Gläser 1999; Jöns, Lüth, and Schäfer 2005, respectively). Meanwhile, the investigation of shipwrecks and their cargoes in the Öresund at the mouth of the Baltic, along the coast of North Germany and in the Finnish archipelagos is helping to map the content, direction, and mechanisms of the maritime trade in completed Western European commodities that linked the ports and people of the region (Gaimster 2000a). These latest urban deposits and maritime contexts contain the objects that cemented the cultural identity of urban mercantile communities on the Baltic rim for hundreds of years. The archaeology of the Hanseatic trading town in the Baltic, with its prodigious and well-preserved artifact sequences, offers the prospect of investigating some key attributes of preindustrial European society. Such attributes include the development of merchant capitalism, the formation of the (modern) class system, and the processes of European colonialism.

THE BALTIC CERAMIC MARKET, 1200–1600

Red Earthenware and Stoneware: The Emergence of a Common Market Area

The traces of the early phases of the emerging international pottery market around the North Sea and in the Baltic littorals during the thirteenth to fourteenth centuries are dominated primarily by the trade in decorated red earthenware and the migration of its production from Western Europe to the southern Baltic zone, and, secondarily, by the increasing competition from the more robust and functionally superior stoneware vessels from Western and Northern Germany (Gaimster 1999a).

The development of towns along the Baltic littoral during the course of the thirteenth century stimulated a demand for high-quality ceramic tableware

suited to the needs of urban living and social competition. Initially, imports of highly decorated lead-glazed redwares from the North Sea coast of Flanders and the Netherlands satisfied this demand, while the Bruges kilns of circa 1200–1350 acted as the epicenter of the industry (Schäfer 1997; Verhaeghe 1989). However, the discovery of a series of redware production centers along the Öresund, which includes the coastlines of the Danish islands of Funen and Zealand and the coastline of Western Scania, at Lübeck, and, more recently, at sites along the Mecklenburg coast, all of which produced typologically and technologically indistinguishable wares to the Low Countries exports, suggests the movement of Western European workshops into the Southern Baltic region from the early thirteenth century onward. Here, suitable clays were abundant, and could be fired through the oxidizing process to emulate the red earthenware jugs and cooking utensils, such as dripping pans, so familiar to the urban populations of the North Sea littoral.

Although the contemporary stonewares imported into the Baltic from the Rhineland and Lower Saxony were robust, stackable, and well adapted to ocean transportation, they could not be produced close to the destination marketplace in the Baltic Sea region due to the absence of suitable clays and the know-how for high-temperature firings. By contrast, highly decorated red earthenware jugs were a relatively fragile commodity and could not withstand long-distance transportation. Given their value as an active medium of social competition necessitating continuity in the supply of these products, the new towns of the southern Baltic region were obliged to import potters from the Low Countries with the know-how of working local clays and other raw materials. In the ports of Mecklenburg and Pomerania, highly decorated redware jug production accounts for between 8 and 30 percent of all domestic ceramics found in mid- to late-thirteenth-century levels (Rębkowski 1997). These products occur in similar proportions at all major trading ports and urban centers of population on the Baltic littoral by 1300, from the Öresund and Scania (Lund, Kalmar) to the trading post of the Hanseatic fur traders in the Russian pine forests. Highly decorated red earthenwares were part of the essential toolkit for the Western European community identity, enabling traders and colonizers to maintain a certain level of socially competitive activity, reinforcing Continental European class distinctions. Rather than risking the precariousness of long-distance transportation and the associated costs of import, consumers encouraged the migration of potters to exploit local clays to replicate wares in the Western European idiom. The practice of redware potters migrating from Western Europe to exploit new markets around the Baltic Rim continued well into the eighteenth century and was a key feature of the industrialization of ceramic production in the region. Commonly, as in Stockholm in Sweden, Tallinn in Estonia or Turku in Finland, the earliest documentary references to potters indicate that German migrants

were responsible for stimulating local production. In Kalmar, on the southeast coast of Sweden, recent excavations have revealed the workshop of consecutive North German potters, operating from the early to mid-seventeenth century, starting with Peter Pole of Stralsund (ca. 1618) and Albrecht Pottemakere (ca. 1625–48), as local documentary sources suggest (Blohmé 1995). Trace elemental analysis of excavated urban deposits helps trace medieval traded redwares to their manufacturing source, creating a platform for reconstructing local pottery supply networks (Gaimster 2013).

In terms of numbers, however, the late medieval international ceramic trade in the Baltic was dominated by the competition between stoneware producers in the Rhineland, Lower Saxony, and Saxony (Gaimster 1997: ch. 3.3, 1999a, 1999b, 1999c). Although outcrops of clay suitable for high-temperature stoneware production were limited to Germany, its robust body enabled stoneware to be transported in bulk and over long distances (Gaimster 1997: ch. 2). German stoneware jugs, mugs, and bowls account for, by far, the largest group of imported household commodities in the North Sea and Baltic urban archaeological record. At Rostock in North Germany, for instance, Siegburg stoneware alone dominates the local excavated sequence, comprising between 58 percent and 76 percent of the total ceramic recovery rate (Schäfer 1997). In Kołobzreg, the comparative figure is 35 percent for Siegburg stoneware alone (Rębkowski 1995).

Intensive workshop production resulted in a relatively low cost to the consumer and the ability to reach a wide spectrum of the population. The rapid development of the fully fused stoneware body in the Rhineland and Lower Saxony from the end of the thirteenth century coincides with the accelerating growth of urban populations in Northern Europe. With its technological superior body, which is impervious to liquids, stainless, and odor free, stoneware revolutionized so many domestic activities from washing up to preserving food. In addition, its increasingly varied repertoire of forms from the fourteenth to fifteenth centuries reflects a market response to the multiple drinking, decanting, transport, storage, and sanitary needs of town dwellers across the continent. By 1350, the decorated redwares had a significantly lower profile in the Baltic market due to the pressure from German stoneware exports (Schäfer 1997). Despite its plain, utilitarian body, stoneware captured a niche in the popular tableware market of Northern Europe, enabling the aspiring middle classes to imitate aristocratic drinking and dining practices in a less expensive medium, substituting precious or base metalware and drinking glasses with finely potted ceramics that imitated their role (Gaimster 1997: ch. 4.4). Excavations of the wine cellar in a late medieval civic administrative building situated in the Hanseatic Kontor settlement at Bergen, Norway, have revealed the reliance of the local urban merchant elite on imported Rhenish stoneware and Central European forest glass vessels for the social consumption

of imported wine and other alcoholic beverages (Tøssebro 2012). The dominance in the large ceramic assemblage of Siegburg stoneware, *Jakobakanne*, and other table jugs, drinking bowls, and funnel-necked beakers normally associated with wine drinking (Siegburg stoneware accounted for 1,724 out of 1,996 sherds of excavated ceramic or 86 percent of the total) associated with the building, which was in use between the mid-fifteenth and mid-seventeenth centuries, is reflective of the close synergy between imported social practices and material culture in the Hanseatic realm. German stoneware was used by translocal merchants and the resident urban community to reinforce key aspects of continental European cultural identity. German stoneware may be regarded as a type-fossil of mercantile or "Hanseatic" urban culture, a unique class of *Kulturträger,* which linked consumers irrespective of means from London to Tallinn in common drinking and dining habits (Gaimster 1993, 1999b, 1999c).

Among the bulk trade in German stoneware to the Baltic during the late Middle Ages, there is one group of vessels, which, by virtue of its elaborate ornamentation and distinctive social distribution, may be discussed realistically in terms of a Hanseatic luxury export and status symbol. According to recent trace-elemental analysis of the ceramic body, the Lausitz region of Saxony is the most likely source for a series of high-quality stoneware goblets and beakers which date to the fifteenth century and are found across the study zone (Stephan and Gaimster 2002). These characteristically dark-bodied and thinly potted stonewares with their Gothic church architectural forms, complex applied anthropomorphic plastic ornamentation, and geometric rouletting, with the occasional use of gold foil, are found in small quantities but enjoy a distribution in both urban patrician households, and on monastic and feudal sites alike (Stephan and Gaimster 2002: 159–161). Archaeological finds have also demonstrated the extent to which utilitarian plain stoneware vessels were given enhanced meaning among expatriate trading communities. Excavations on St. James's Street in the Livonian frontier town of Tartu, Estonia, have produced an example of a standard, undecorated fifteenth-century Siegburg beaker inside its original molded leather container, which was incised with a frieze of forest animals and birds (Gaimster 1999c; Figure 14.2). A discovery at Greifswald on the Mecklenburg-Lower Pomerania coast of an early-fifteenth-century Siegburg stoneware beaker found within a similarly tooled leather case (Schäfer 2000: fig. 159) reinforces the impression that, despite the ubiquity of western European stoneware in the region, such vessels were highly prized and that the symbolic value of these objects could be amplified through embellishment with a medium more suitable for decoration, such as molded and tooled leather.

Following transshipping at major ports, recent finds of wrecks containing cargoes of medieval and early modern German stoneware in the Finnish archipelagos at the entrance to the Gulf of Finland are combining to form a picture



14.2. Imported stoneware table and drinking vessels from Siegburg and the Rhine region, fifteenth century. From excavations in the Tartu historic town center, Estonia. Permission of Tartu City Museum. Photo by Eero Heinloo.

of coastal redistribution of Western European trade ceramics in the eastern Baltic zone during the late medieval to early modern periods (Gaimster 2000a). The cargo of Lower Saxon stoneware jugs of the late thirteenth to early fourteenth century date which was recovered from a shallow-draught clinker-built trading vessel sunk at Egelskär is representative of the trade in imported domestic consumer goods along the coast, having been transshipped to the major ports from ocean-going ships (Wessman 2007). To date, more than thirty decanting and drinking vessels, all originating from a single stoneware factory source in Lower Saxony, have been recovered. Possibly loaded at Stockholm, it may be speculated that the vessels formed part of a small cargo of Western European domestic utensils heading for the nearby trading port of Turku. The vessel was also carrying limestone from Denmark (Scania), whetstones from Norway or Germany, and iron bars from Sweden. Such lighter and agile vessels were essential to navigate the densely islanded and hostile rocky coastline of the region. Continuity in Hanseatic pottery supply and in the precise means of coastal distribution is visible in the well-preserved contents of the Esselholm wreck in the Tammisaari archipelago. Found in the glazed earthenware cargo from the Netherlands were three highly decorated Rhenish stoneware bottles dating to the period 1550–1580 (Edgren 1978).

Finds from the castle harbor (*Slottsfjärden*) in Kalmar in southern Sweden, drained and excavated in 1932–1934, provide an instant

snapshot of the competition in the Baltic stoneware market during the late medieval period. The size and range of this ceramic assemblage is unique in northern European historical archaeology. Less likely the products of rubbish dumping and more likely those of loss during harbor transshipment operations and the unloading of ships' cargo, the ceramics recovered are virtually all in unused condition and a high proportion were in complete or semicomplete form. Around 5.5 percent out of the total of more than 31,000 vessels and fragments of pottery can be identified as Western European in origin. Out of the 885 German stoneware vessels dating to the fourteenth to fifteenth century, 68 percent could be sourced to Siegburg (Rhineland), 21 percent to Lower Saxony, 9 percent to Waldenburg (Saxony), and 3 percent to Langerwehe and Raeren, and other locations in the Rhineland (Elfwendahl and Gaimster 1995). The concentrations of German stoneware found at Kalmar may also be related to the relatively high numbers of foreign names recorded as resident in the city. During the late fourteenth century, one third of out of a total of 2000 family names listed as resident in the city were German in origin. By the end of the fifteenth century, between 50 and 66 percent of the lay population may have belonged to the foreign mercantile community (Selling 1982). A similar explanation could also be made for the Stockholm stoneware sequence. Here, the well-documented population of resident German merchants provides a context for the high frequency of imported stoneware finds recorded in *Gamla Stan* (Old Town) and in neighboring districts (Gaimster 2002a).

The subsequent phase of the urban pottery market in the Baltic is defined by a profound shift in the balance of utilitarian and social roles performed by imported ceramic products. Increasingly, from the end of the fifteenth century onward, polychrome-painted tin-glazed earthenware (*maiolica*) from the southern and western regions of Europe, together with stoneware and earthenware stove-tiles from Germany, both employing the use of mold technology and printed sources for ornament, injected a new luxury element into the urban domestic inventory of the region. The archaeological distribution of polychrome-painted maiolica vessels provides a further measure of the critical role of the Hanseatic trading network in mediating the arrival of the Mediterranean Renaissance culture in the North (Falk and Gaimster 2002). Excavations in major mercantile centers such as Elbląg/Elbing on the Polish Pomeranian coast and Stockholm, Kalmar, Malmö, and Lund in Sweden have produced the most substantial groups of painted majolica, which arrived through the Hansa trade with Antwerp and Bruges. Comparative quantitative analysis of castle finds in the hinterland of the towns clearly shows that the urban mercantile communities played a leading role in defining consumer taste in the region.

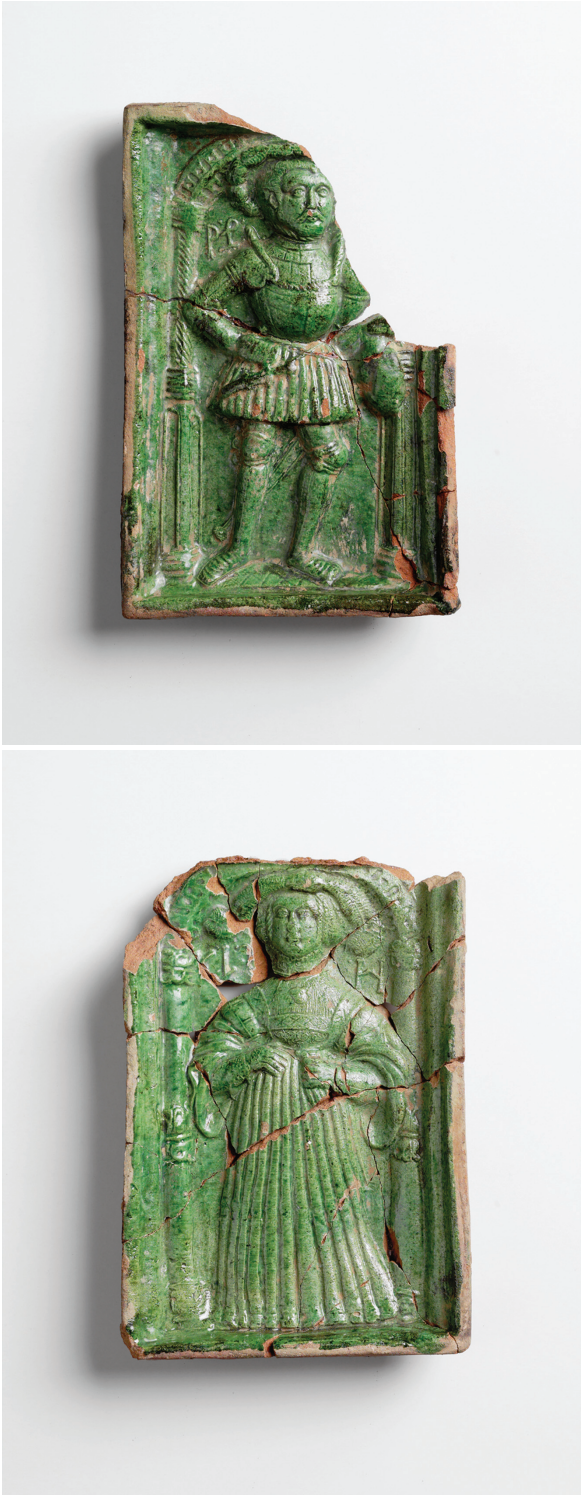
The Smokeless Ceramic Tiled Stove: Type-Fossil of Hanseatic Cultural and Technological Transfer

The archaeological evidence for the introduction of the smokeless ceramic tiled stove into the Baltic Sea region from Central and Western Europe forms a further key comparative measure of long-distance trade, together with technological and cultural transfer. Stove-tile finds make up almost 20 percent of all domestic ceramics found on urban mercantile and residential feudal sites across the region and, as such, represent a key element in the Hanseatic domestic inventory and in trading activity (Gaimster 1998, 1999b, 1999c, 2002b, 2005, 2007). Molded tiles of various designs were used in the construction of large stoves of architectonic form, which were mainly erected in living spaces to form a key element of the domestic interior design. Ceramic stoves were normally fitted with stoke holes and flues that were serviced from another room or corridor so as to prevent any fumes polluting the room in which they were situated. Earthenware stoves contributed not only a technological transformation of the domestic environment but also, with the development from the mid-fifteenth century of colored lead and tin glazes and molded reliefs, they introduced a new visual and iconographic element into the home. Scenes from the lives of the Holy Family and the saints based directly on the individual narrative compartments found on carved wooden altar shrines in churches were replaced during the early stages of the Lutheran Reformation by the secular iconography of coats-of-arms and portrait busts of the region's temporal rulers and religious leaders. As with relief-decorated stoneware, the ceramic stove provided a medium for the circulation of new attitudes and beliefs on the domestic scene. In a medieval suburb of Tallinn, the discovery of a tile molded in high relief with the motif of an ape trying on a shoe – the design based on a woodcut published in a mid-sixteenth-century Antwerp emblem book – signifies the long-distance circulation of Western European humanist debates throughout the translocal mercantile communities in the North and the role of its members in spreading the ideas and designs of the Continental Renaissance (Gaimster and Russow 2011).

Ceramic stove-tiles, in contrast to stoneware vessels, were a fragile product and it was risky to transport them over long distances. Although it is possible to identify rare instances of North or Central German tiles imported into southern Scandinavia (Gaimster 1998), it is clear from the number and distribution of production sites and from the analysis of the fabrics that most stoves made in the Baltic region were manufactured locally, often with the use of molds imported from Northern and Central Germany. Following the model for the spread of redware manufacture in the thirteenth century, production on this scale can only be explained by the movement of specialist craftsmen or even workshops around the Baltic Rim. The documentary references

from the mid-sixteenth century to German tile-makers (*pottomakare*) settling in Lund, Malmö, and Kalmar in Sweden and Turku in Finland confirm the archaeological evidence of craftsmen migrating from the continent into the region to exploit the developing urban demand for smokeless central heating (Gaimster 1998, 1999b, 1999c, 2005). The migration of production is evident in the distributions of pre-Reformation tiles molded in relief with biblical figures and scenes, surrounded by architectural and botanical ornament, derived from church altarpiece carvings. A workshop deposit of molds and wasters, with designs including scenes from the Life of Christ, was found in the center of Lübeck in 1939 (Gaimster 2001b). More recent excavations in the cellar of a late-fifteenth-century house on the Pläterstrasse in Rostock produced molds and wasters contemporary with other examples of Lübeck manufacture. Both the Rostock and Lübeck workshops generated matrix-identical molds of the *Charity of St. Martin,* suggesting that they were linked (Burrows and Gaimster 2001: fig. 6). The format of the North German molds, their border ornament, and their design repertoire drawn from the Life of Christ and the Lives of the Saints compare closely to the molds found alongside production waste in the Norrmalm district on the outskirts of medieval Stockholm (Gaimster 2002a; see Figure 14.3).

The strengthening of the German cultural connection to the Baltic is also evident in the series of panel-tiles inset with portrait roundels, which were produced and traded across the region form the second quarter of the sixteenth century. Tiles molded with medallic and woodcut-based representations of the leading protagonists of the Lutheran Reformation have a wide archaeological distribution, while the secular personality cults were more suited to the new Confessional and sectarian loyalties of the Baltic merchant communities. The production of portrait medallion tiles of Johann Friedrich I, Elector of Saxony (r. 1532–1547), Philip I, Landgrave of Hesse (r. 1519–1567), and their respective consorts coincided with the lifespan of the Schmalkaldic League of Protestant princes (1530/1531–1547). The distribution of molds and matrix-identical tiles with portraits of Saxon Elector Johann Friedrich and his consort, Sybille of Cleves, stretches from Lübeck, Rostock, and Stralsund in the south to Stockholm, Turku, and Riga in the North. At the far reaches of the Hansa's western orbit, the City of London has also produced a parallel series of mold-identical tiles (Gaimster 2000b: 145–146, 2001b, 2003: 132–133). These finds place the English metropolis squarely within the Hanseatic cultural trade network, which was so instrumental in spreading the message of Protestantism beyond its area of origin in Northern Germany. In contrast to the immediate pre-Reformation phase in the Baltic zone, in which elite residential sites, such as castles and monasteries, dominate the archaeological distribution of the highly representational stoves, the new products for secular use (particularly those displaying Lutheran affiliations) appear with greater frequency in urban



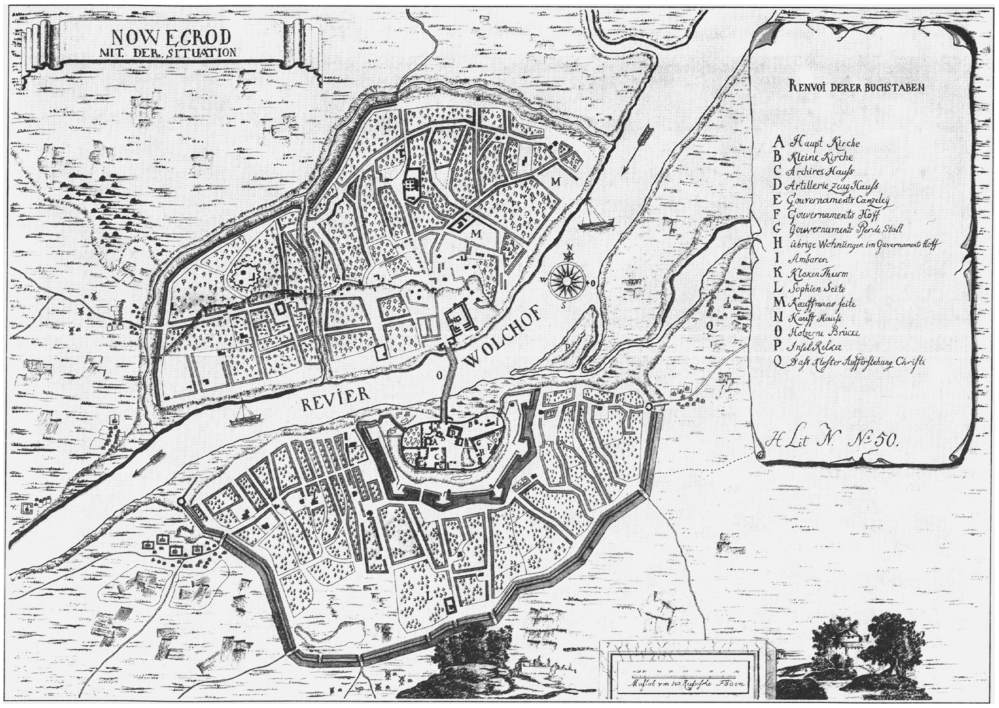
14.3. Lead glazed earthenware stove-tiles molded with full-length portraits of Landgrave Philip of Hesse (1504–1567), coleader of the Schmalkaldic League of Protestant Princes, and his consort, Christina of Saxony (1505–1549), mid-sixteenth century. Excavated in Haapsalu, Estonia (Läänemaa Museuum, Haapsalu HM 8850:2; photographs by Klaus Koszubatis).

contexts. This revised pattern in the archaeological distribution suggests a radical shift in consumption by which urban mercantile communities were taking the lead in the spread of new Confessional loyalties in the region.

URBAN MERCHANT FASHION

The trade in domestic ceramics fulfilled dual utilitarian and social roles among the translocational Hanseatic merchant communities that settled in late medieval Northern Europe. The archaeological distributions provide a measure of the transfer into the region of alien cultural codes and lifestyle practices, together with class distinctions, notably in the spheres of table culture and domestic comfort. In addition to the evidence for the long-distance supply of domestic utensils, one persistent pattern in the archaeological record can be discerned in the transplantation of manufacture closer to the marketplace where the necessary raw materials (clay resources and timber fuel, for instance) existed nearby, as in the case of highly decorated red earthenware jugs or molded earthenware stove-tiles. Such relatively fragile ceramic products were less suitable for long-distance transportation, whereas stoneware, for which the appropriate raw materials were rare outside of narrow seams of high-performance clays in Western and Central Europe, was robust enough for bulk seagoing transport.

However, the success of the commodity import trade and of translocational manufacturing ventures hints at something more than commercial enterprise and the transfer of technical expertise. The excavated record also reflects high levels of brand loyalty and of embedded cultural and ethnic identity in domestic material culture that characterizes the outlook of Hanseatic trade diasporas on the North Sea and Baltic rim. A survey of excavated finds from castle and other feudal residential sites in the Baltic Sea region from the thirteenth to sixteenth centuries points to high degree of social competition with the residents of ports and towns (Gaimster 2001a). There is considerable overlap in the sequence of imports and it can be argued that feudal residential households were participating actively in Hanseatic consumer habits, effectively emulating the taste of their mercantile counterparts. It is reasonable to conclude that Hansa merchants dictated contemporary tastes in design in Northern Europe and, as active consumers, were also the stimulus for the transplantation of continental European craft production into the region. At the same time, the circulation of prodigious quantities of Western European household goods and the various attempts to reproduce them locally points to a proto-colonial scenario comparable to early European contact sites in North America and the Caribbean where settlers asserted their cultural affiliations, ethnicity, class, and religion through the transplantation of European domestic material inventory and the transfer of craft production to service the market demand of the diaspora communities and local contact populations (Gaimster 2005, 2007, 2013).



14.4. Plan of medieval Novgorod, Russia, first half of the eighteenth century, showing mercantile side of the city on the north bank of the river Volkhov (source: Wikipedia Commons).

The Hanseatic cultural signature in the North Sea and the Baltic is not exclusive to excavated ceramics. A parallel trajectory of a merchant-driven market in imported glassware drinking vessels from the central and eastern regions of Germany in the fifteenth to sixteenth centuries has been excavated across the region (e.g., Haggrén 2003). Switching focus briefly from foodways to foodstuffs, archaeobotanical research in towns across Mecklenburg-Lower Pomerania has uncovered a distinctive horizon of imported exotic plants, fruits, and spice products originating in the Mediterranean, Asia, or Africa during the later Middle Ages (e.g., Karg 2007; Wiethold 2005). The archaeological distribution of these products points toward the development of a luxury trade in pepper, cardamom, cinnamon, nutmeg, almonds, rice, and dried fruit amongst the Hanseatic urban patriciate. Once more, it appears that the aspirations and socially competitive behavior of the mercantile elite stimulate cultural innovation and new trends in consumer taste.

CULTURAL TRANSFER AND RESISTANCE IN THE POTTERY MARKET

In the case of Novgorod, located on the southern edge of the northern Russian pine forest zone and at the northeastern margins of the Hanseatic

commercial network, the pattern of urban distribution appears atypical. This principal Hanseatic trading station (*Kontor*), straddling the northern end of the Baltic–Black Sea and Baltic–Caspian trade routes, supported two substantial European mercantile communities during the late Middle Ages, firstly the Gotlanders' Court, or *Gotenhof*, founded by the early twelfth century and the Court of St. Peter, or *St. Peterhof*, the German trading enclave firmly established in 1191 and operational until the end of the fifteenth century. Both settlements clustered close to the wharves of the river Volkhov on the market side of the city. The primary purpose of these trading stations was to exploit the rich forest wilderness of northern Russia and Karelia for pelts, pine resin (for turning into pitch), and honey. In return, the city of Novgorod consumed vital raw materials such as amber and silver from the Baltic and finished goods from Western Europe, including cloth and metal utensils, along with foodstuffs and preservatives, such as herring and salt (Brisbane and Gaimster 2001).

However, here a strikingly contrasting picture of cultural influence and transfer derived from trading activity can be observed. The highly polarized distribution of western ceramic imports in and across the foreign residential areas of the Novgorod metropolis rejects the pattern of evidence recorded in other regional trading centers, notably in the neighboring Livonian-Russian border city of Pskov where western imports were dispersed more widely around the settlement (Gaimster 2001c). Evidently in Novgorodian society, with its preference for wood in the manufacture of domestic vessels and other utensils, there was entrenched resistance to the use of ceramic tableware from the West. Although technically superior in function to the indigenous ceramics, imported red earthenwares and stonewares were generally rejected by the native population in favor of elaborately turned and painted wooden drinking vessels. The distribution of the imports suggests that their use was by and large exclusive to the Hanseatic trading enclave, which was thus able to maintain autochthonous table and drinking practices at distance.

At the edge of the pine zone, pottery vessels (in this case reduced gray earthenware) were largely relegated to the utilitarian functions of cooking and food preparation while wood, with its suitability for lathe-turning, elaborate carved decoration and painted surfaces, was more suited to table use (Hather 2001). Therefore, this preference for wood at the expense of ceramics for dining and drinking, cannot merely be given a functional explanation, but is probably also related to antipodal foodways and drinking cultures. The asymmetrical imported pottery distribution recorded at Novgorod is incompatible with the archaeological picture derived from peer Hanseatic *Kontor* sites such as London or Bruges in the West, where Rhenish stoneware imports are found across the urban landscape. In Novgorod, behind the Christian-Orthodox frontier of Northern Europe, both foreign mercantile and native host communities

were keen to express their respective ethnic identities and cultural affiliations through the exclusive use of material culture.

FROM IMPORTED TRADE GOODS TO A SHARED COMMUNITY IDENTITY

The identification of Hanseatic cultural signatures in domestic archaeological assemblages creates a valuable tool for exploring social and technological strategies of trade, cultural transfer, and, in the case of late medieval Northern Europe, the proto-globalization of products, ideas, and beliefs arising from advances in transportation, communication, and infrastructure, all generating an interdependency of economic and cultural behavior traits. Such assessments should be tested at every opportunity by studying local excavated material and its context so that material consumer patterns form an interpretative tool and not an immediate conclusion. Whilst the polarized ceramic distributions in Novgorod alert us to the possibility of community resistance to imported trade goods and associated foreign domestic cultures, recent reappraisal of the late medieval imported ceramic profile of Turku and of the wine cellar in Bergen have triggered a different interpretation of cultural transfer in the North Sea and the Baltic in the late Middle Ages, suggesting that both the German merchant diaspora and the local population shared in imported domestic drinking, dining, and heating practices over time and, thereby, created a common mercantile identity (Immonen 2007; Tøssebro 2012). A critical next stage in this program of research is to further clarify respective continuities and divergences in the supply of goods and materiality of diasporic trading communities and of indigenous populations who shared the same townscape. Identifying translocational lifestyle habits amongst merchant communities is one step; recognizing the intricate dynamics of sustained cultural transfer between and amongst these communities is the next.

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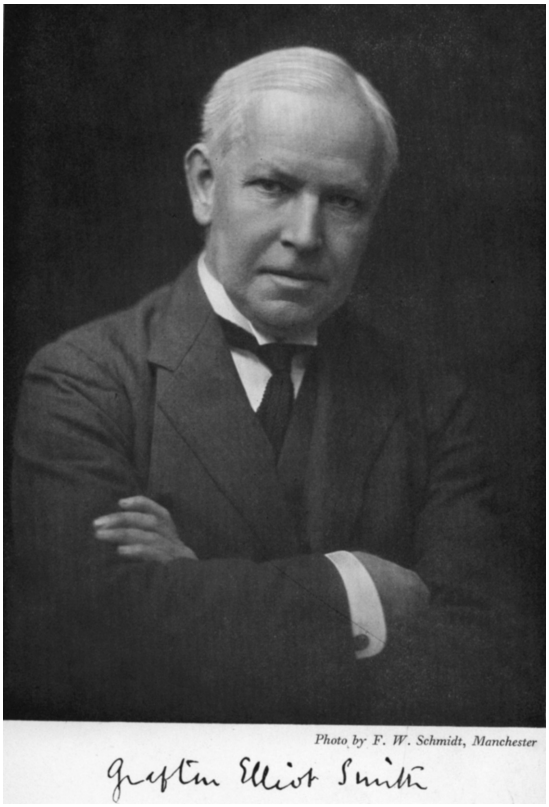
ELLIOT SMITH REBORN? A VIEW OF PREHISTORIC GLOBALIZATION FROM THE ISLAND SOUTHEAST ASIAN AND PACIFIC MARGINS

Matthew Spriggs

INTRODUCTION

It would seem that a very obvious ancestor for efforts to discuss global systems and long-distance interactions in the development of "civilization" should be Grafton Elliot Smith (1871–1937; henceforth GES). His ideas on long-distance interaction, pejoratively described later as "hyper-diffusionism" (Daniel 1962) were developed along with colleagues William Halse Rivers Rivers, one of the founders of modern social anthropology, and William James Perry, his disciple and colleague at University College London (see Crook 2012 for a somewhat uncritical biography of GES). GES is rarely referred to today in archaeology or anthropology; he is indeed seen as one of anthropology's great embarrassments. His ideas and those of Perry and "the later Rivers" (Slobodin 1997) were decidedly rejected by British anthropology in the years after Rivers's untimely death in 1922, despite vigorous efforts by GES to defend their views almost until his own death some fifteen years later. In the history of British anthropology, indeed that of anthropology in general, GES is very much the (Australian) elephant in the room that everyone chooses to ignore. Archaeologists have clearly taken their cue from the anthropologists in this regard and have generally ignored him as well.

It is not the purpose of this chapter to rehabilitate GES. Many of his ideas were justly criticized at the time of their development, and many more can now, after what Kristiansen (this volume) has called the "second science revolution" in archaeology – radiocarbon dating, be shown simply not to work



15.1. Grafton Elliot Smith (1871–1937), portrait (from Wilson 1938; photograph: F.W. Schmidt). Credit: Wellcome Library Images.

with the better chronological resolution currently in place. There are still fervent exponents of significant Trans-Pacific contacts in the development of Central and South American cultures, something championed by GES (T. L. Jones et al. 2011). These contacts are unconvincing except perhaps the possible transfer of the chicken late in prehistory from Polynesia to South America (Storey et al. 2007)[1] and the sweet potato and bottle gourd in the other direction to Eastern Polynesia (Clarke et al. 2006; Green 2005). Even the fitted stone architecture of Easter Island is not convincing as evidence of links between that Polynesian island and South America, although it seems to impress many of my Pacific colleagues. But GES *was* onto something and it is that something that we all gathered in Gothenburg in 2013 to discuss: the importance of long-range connections between continents and regions.

WHO WAS GES?

GES (Figure 15.1) was many things throughout his life (Slobodin 1997: 149–150): Australian-born; the top comparative anatomist of his generation; an

outstanding physical anthropologist and neurologist; an expert in the study of mummification and the first researcher to x-ray an Egyptian mummy; contributor to our modern understanding of "shell shock"; professor of anatomy at Manchester 1909–1919 and at University College London from 1919 until his death; and dedicated controversialist concerning the diffusion of culture from an Egyptian homeland. His views have often been ridiculed, but this is usually done by conflating ideas he held at different times during his career, and then further exaggerating them. His supposedly "bad" influence on W. H. R. Rivers in turning him into a diffusionist supporter ("the later Rivers") has earned him the enmity of almost every social anthropologist since.

GES's Egypto-centric views were developed at least in part as a reaction to the Pan-Babylonism promulgated at the beginning of the twentieth century by mainly German Assyriologists such as Hugo Winckler (1863–1913). These scholars saw early Mesopotamian culture as dominant throughout the ancient Near East and as formative on Bible stories and astronomy throughout the world (see Thompson 2013 for a useful overview). All suggestions of independent or parallel development were rejected by this school, as they were by GES.

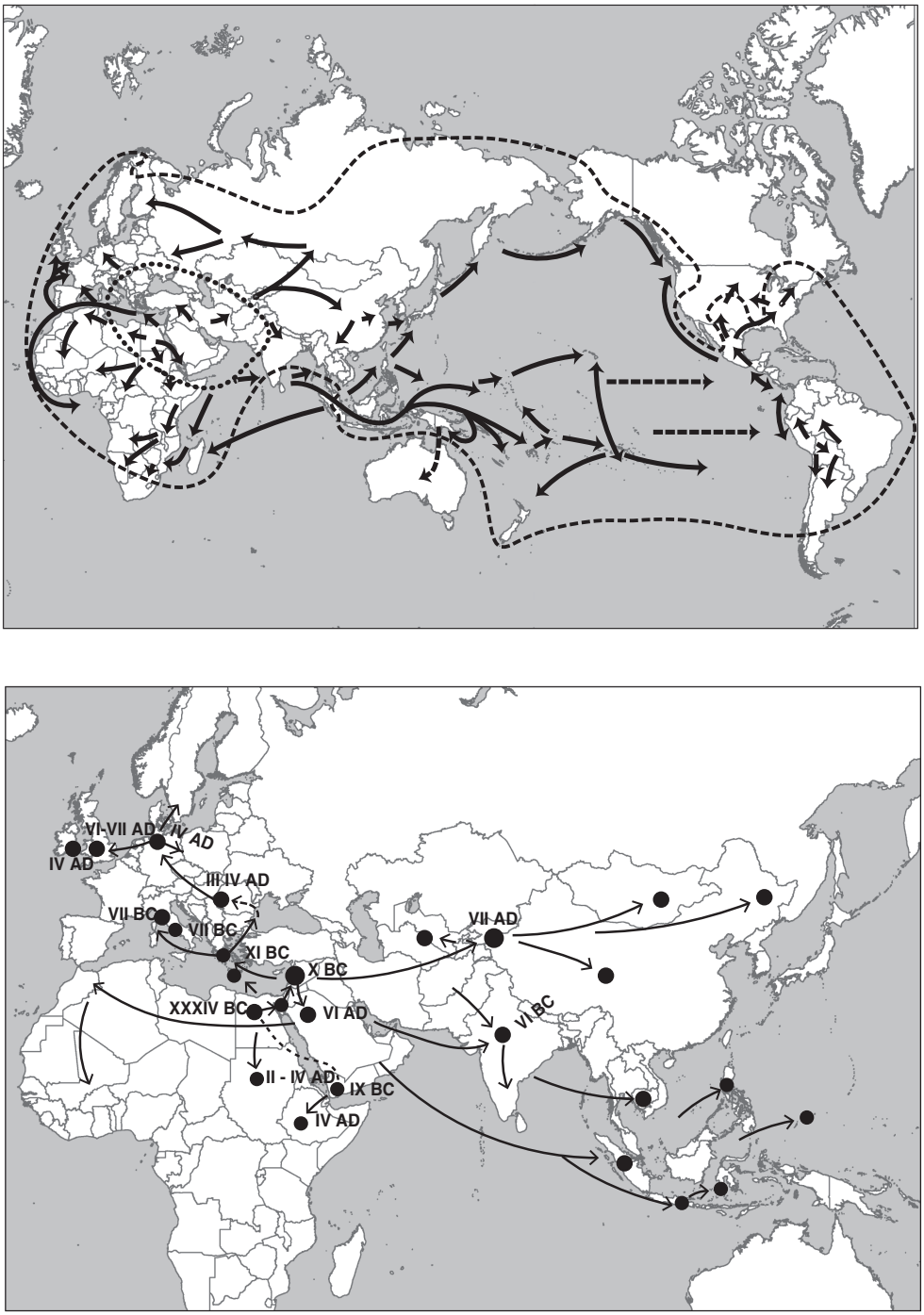
Perhaps the most coherent exposition of GES's later views can be found in *The Diffusion of Culture* (1933). The chapter titles give a flavor of this extended critique of William Robertson, W. H. Prescott, and E. B. Tylor – "The Cartesian Doctrine of Principal Robertson," "The Enigma of Prescott," and "Tylor's Conflict," all to be contrasted with "The Reality of Diffusion" as the concluding chapter. GES's views at that time can be summarized:

1. Diffusion is the primary mechanism to explain similarities between cultures in what GES often calls "arbitrary elements"; essentially, these are things to his mind very unlikely to be thought up twice: the alphabet, boomerangs, inlay jewelry, the ocular on boats, ear mutilation, cranial deformation, and so on.
2. While GES does not deny the possibility of independent invention, he claims he has never seen a convincing example of the process.
3. GES denies any value in stadial views of evolution such as he thought Tylor's to be, stemming from his dislike (as a neurologist and early psychiatrist) of talk of the psychic unity of mankind. He also considered that the term *evolution* in its unilinear sense as used by anthropologists of the day was in fact analogous in biology to the discredited idea of spontaneous generation rather than evolution per se, the latter requiring descent with modification and subsequent spread in space and time. Given this definition he could well have considered himself to be a *true* evolutionist!
4. The independent transition to "civilization" occurred only once – in Egypt – and then spread elsewhere around the globe. It arose through the management requirements of artificial irrigation to harness the Nile floods (cf. Wittfogel

1957's concept of "Oriental despotism"). Civilization then spread directly to neighboring areas of Western Asia, the Mediterranean, and East Africa, and indirectly through the agency early on of metal prospectors/traders to much of the rest of the globe – copper and gold metallurgy being considered Egyptian discoveries. Perry (1915) added pearls as a further trade stimulus in nonmetal using areas such as the Pacific Islands to save the theory in relation to the spread of civilization via Polynesia to the Americas. Although his arrows all went one way (out of Egypt), clearly minerals and pearls were flowing back the other way. His maps (Figure 15.2) often show a surprisingly close similarity to those created by current practitioners of world-systems ideas.

5. The spread of world religions, particularly Islam to which GES devoted much of the first chapter of his book and for which he clearly had a deep respect, provided examples of the diffusion process as resulting in the spread of entire cultural complexes rather than just isolated traits: "[T]he spread of a religion was the diffusion of a particular civilisation" (Smith 1933: 35). He further suggested that: "It is in the highest degree improbable that such diffusion of culture as is revealed in the histories of later religions did not also occur in the case of the earlier peoples with even more catholic faiths, in which all the art and crafts, all the dances and games, music and drama, almost all customs and myths, had definite ritual significance and were part and parcel of the people's religion" (ibid.). The example GES had in mind was what Perry called "the archaic civilisation" of the *Children of the Sun*, as he titled his 1923 book, and others labelled as the "megalithic culture." Both have had a bad press but should not distract from a reconsideration of the general model: Some of Kristiansen's ideas about northern Europe are not incompatible (in e.g., Kristiansen and Larsson 2005) and, similarly, some of the notions discussed by Rowlands (this volume) towards the end of his paper link Indian and African religious practices, as do Kusimba and Whitfield (this volume).
6. GES did not see migration as a primary mechanism for the spread of civilization; indeed, his views on diffusion processes were considerably more subtle than are usually portrayed: "The diffusion of culture is not a mere mechanical process such as the simple exchange of material objects. It is a vital process involving the unpredictable behavior of the human beings who are the transmitters and those who are the receivers of the borrowed and inevitably modified elements of culture. Of the ideas and information submitted to any individual only parts are adopted: the choice is determined by the personal feelings and circumstances of the receiver… Such selection and transformation occur in all diffusion of culture not only from one individual to another, but even more profoundly in the passage from one community to another" (Smith 1933: 10).

It seems to have been the early twentieth century's increasing globalization that convinced GES of diffusion as a universal explanation: "If we eat bread made



15.2. Examples of GESs' maps redrawn by Rich Potter: (a) "To illustrate the world-wide diffusion of Culture" (1929: fig. 67; cf. 1933: fig. 19). Original caption reads: "Starting in Egypt in the fourth millennium it extended as far as the inner (dotted) oval by 2500 B.C. at the latest. By the time of the European expansion (1500 A.D.) it had reached the outer (broken) line, beyond which Food-Gatherers were left undisturbed" (1929: 455); (b) "To illustrate the origin and spread of the alphabet" (1933: fig. 1).

of Canadian wheat and cheese from New Zealand, we are not only drawing upon resources that are geographically world-wide, but we are at the same time observing practices, the making of wheaten bread and the use of cheese, devised in the Ancient East more than fifty centuries ago. So also in most of the things we are eating and drinking, doing and thinking, at every moment of our lives we are paying unwitting tribute to the diffusion of culture in time and place" (Smith 1933: 8). Perry's view of the same phenomenon was somewhat more directly imperialist-triumphalist in interpretation: "[E]vidence has come to light to show the onward march of civilization in early times in exactly similar circumstances to those in which it is now once again moving up into the interior, namely, the search for gold" (1923: 82). He was talking of New Guinea as that era's "final frontier."

As trade routes across the Indian Ocean linking Africa, Western Asia, India, and Southeast Asia, and via the Silk Route to China are discussed, it should not be forgotten that others have been here before us. Should scholars be worried? GES and Perry will be referred to at times in the following, and it is important to note that they are not perhaps as unworthy intellectual ancestors as has been assumed. The next section addresses the issue of "urban-state envy."

PROBLEMS IN THE ANALYSIS OF NEGLECTED REGIONS

There is absolutely no doubt that various parts of the world have been sorely neglected in discussions of earlier globalizations, which have by and large concentrated on a roughly east-west axis from the Mediterranean–West Asia–South Asia–China, at the expense of everywhere else. Rowlands (this volume) would include Western Europe among the neglected regions, although after the work over many years of Kristiansen and others in linking northwestern Europe to the Mediterranean "centers" in the Bronze Age this can hardly be seen as true today (see, e.g., Kristiansen and Larsson 2005). Unless one takes on board GES's and others' views on Trans-Pacific contacts then the Americas form a special case (Hornborg, this volume). Thus, the neglected areas in question are Southeast Asia, sub-Saharan Africa, and, even more so than even these two examples, the Pacific. Good cases can be made for the importance of all three areas to the ancient globalization story; indeed, they are inextricably linked together in many ways and link directly to areas more usually considered central to global systems models. Talk of "spheres of interaction" as a model may be more accurate than that of cores and peripheries for these areas.[2] However, it is sometimes easy to sound a bit too strident about stressing their relative importance, perhaps a case of "urban-state envy" that needs to be avoided. In particular, the traits that should be avoided are the following:

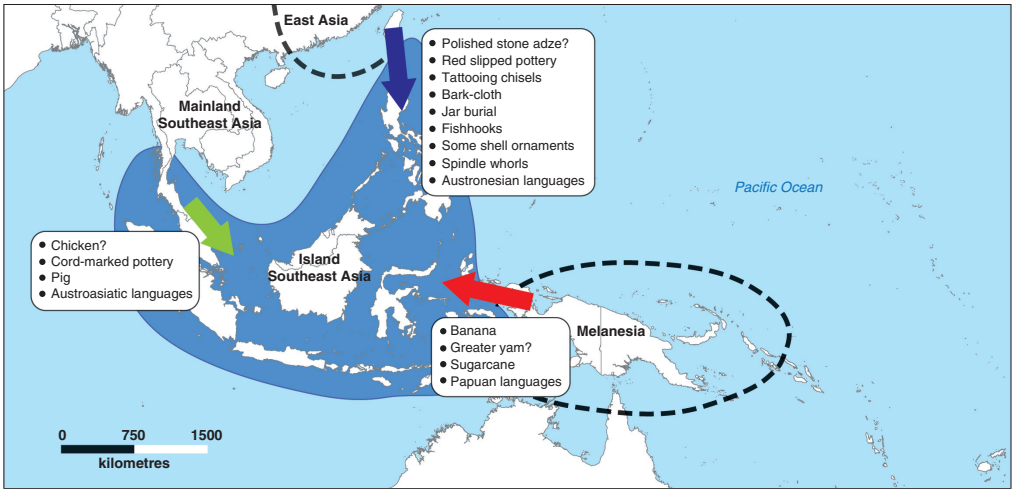
1. A tendency to "boost" our evidence so that fairly small settlements become "towns" and "cities," and volumes of trade become exaggerated. We have to remember that size doesn't necessarily matter.
2. A tendency to push the dates back for "civilization" in particular regions (i.e., using someone else's criteria as standard rather than our own), or a general vagueness on dating so that the region in question fits in more easily with processes in other areas.
3. An often-exaggerated tendency to stress the evidence for contact with the "traditional" global networks (again using someone else's criteria of importance), and/or the uniqueness of the contribution of our particular region: a "golden age" viewpoint.
4. A tendency to stress the disastrous effects of European contact, as opposed to those of any other phase of expansionism. However, this focus is usually completely justified – population decline on censused data of more than 90 percent because of introduced disease in the nineteenth and early twentieth centuries as seen on Aneityum (Vanuatu, South Pacific), for instance, can hardly be downplayed for its terrible effects (Spriggs 1997, 2007a). One wonders, however, what the effects of earlier long-distance contacts may have been in this regard (cf. Blench 2010: 241).

It is fair to claim that, although Africa and to a lesser extent Island Southeast Asia (henceforth ISEA) have been unjustly ignored, the Pacific has been completely off the radar in recent discussions of ancient global systems. This neglect is to the extent that crops that are clearly of Western Pacific origin are often presented, including in precirculated papers for the Gothenburg conference, with the impossibly generic origin of "Asian" rather than Western Pacific. It has to be said, however, that GES and Perry were certainly not guilty of such disregard of so-called marginal areas such as the Pacific, also including Australia (even more neglected) regularly in their diffusionist purview. This imbalance in coverage in relation to ISEA and the Western Pacific will be redressed in the following, while being mindful of the previously mentioned distorting tendencies.

ISLAND SOUTHEAST ASIA AND THE WESTERN PACIFIC (CA. 2000–1 BCE): THE EVIDENCE FOR TWO PHASES OF LONG-RANGE CONNECTIVITY

Neolithic

The starting point for any understanding of the Holocene archaeology of the region is the presence in the New Guinea Highlands of an independent center of agricultural development involving root crops, bananas, and sugarcane – first



15.3. The three "Neolithics" of Island Southeast Asia (from Donohue and Denham 2010: fig. 15.8, with additions).

detectable around 10,000 BP (Denham et al. 2003; Golson 1977). This is of course something that GES would never have contemplated nor understood!

What, for want of a better term, has been termed the ISEA Neolithic, or rather "Neolithics" (Figure 15.3), can be seen as having three important external sources around 4000 BP (Spriggs 2007b, 2012): a Taiwanese Austronesian-speaking one (Pawley 2002; Ross 2008) ultimately of southern Chinese origin bringing in rice and millets, and a range of specialist material culture; a mainland Southeast Asian one directly affecting Sumatra, Western Borneo, and Western Java from about the same period that seems to have been the conduit for the introduction of paddle-impressed pottery to those areas, as well as domestic pigs (Larson et al. 2007; Piper et al. 2009), dogs and perhaps also chickens, and possibly associated with Austroasiatic speakers; and significant agricultural crop derivations from the New Guinea–Pacific area to the east in the earlier Holocene – certainly including bananas and sugarcane, and probably a suite of root crops found within the independent agricultural origin area centered on New Guinea such as taro (*Colocasia esculenta*) and various *Dioscorea* yam species, as well as breadfruit (Lebot 1999). This suite of crops was presumably associated with Papuan-speaking groups. The transfer of wild animals also occurred in the pre-Neolithic from the New Guinea region into ISEA: Marsupial phalangers to Eastern Indonesia and Timor and wallabies to the northern Moluccas (Flannery et al. 1995, 1998; Glover 1986). They were also moved from New Guinea east into the Bismarck Archipelago; there, two kinds of phalangerids and bandicoots were among the translocations prior to 10,000 BP in what is interpreted as a "game park" strategy of stocking faunally depauperate islands with easily hunted mammals (Spriggs 1997).

However, Barker et al.'s (2013: 356) claims – based on what seems to me to be a methodologically flawed study by Bulbeck (2008) – are unfounded that "throughout the Early and Mid Holocene, the communities of ISEA and the mainland rim were linked in a wide variety of maritime interactions that involved exchange of plants, animals and raw materials and finished artefacts of stone, bone, shell, basketry and later pottery." Even more extreme is the claim that in the Early Holocene "people, plants, animals, material culture and information systems were entangled in pathways of movement and exchange" from Melanesia to the Bay of Bengal made by Barker et al. (2013: 356), quoting Barker and Richards (2013: 272). This case is a classic example of what has been warned against in the previous section for those working in neglected regions: boosting the evidence so that volumes of exchange become exaggerated, pushing the dates back for "civilization" in our regions, vagueness in dating so that an area more easily fits in with processes in other areas, and exaggerating the evidence of contact with more supposedly "metropolitan" areas – in this case mainland Southeast Asia/Southern China.

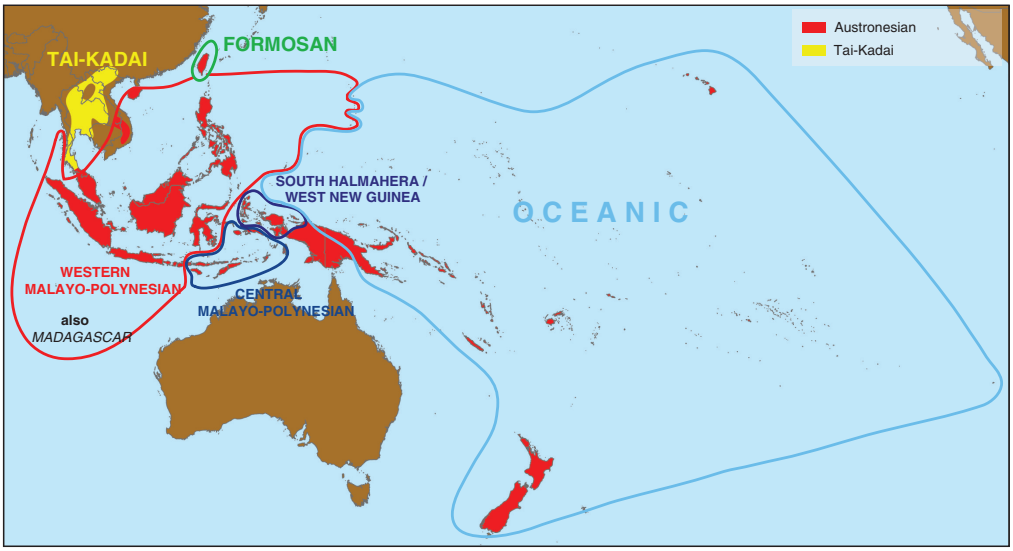
The evidence produced by Barker et al. for this supposed interaction sphere is underwhelming in the extreme, but is usefully summarized in their figure 9.5 (2013: 357). Their "interaction spheres prior to 4000 BP" supposedly linking Melanesia to the Bay of Bengal consist of what amounts to a palimpsest of artefact-type distributions from a series of poorly dated sites where the associations of artefacts and dates can in some cases be called into question and that compress data from the entirety of the Early to Mid-Holocene (10,000 to 4000 BP). It has already been mentioned that, at some time prior to 4000 BP, there was a spread of plants and an arguably unrelated-in-time introduction of wild animals from the New Guinea region into ISEA. Similar movements of the wild pig *Sus celebensis* between Sulawesi and Flores Island are attested, and generic similarities in shell adzes, marine shell scrapers, and rock art between islands as well as the distribution of "an unknown nut" are also presented. The unknown nut could of course be endemic to both islands where it occurs rather than representing "interaction." Supposed spreads of *Fabaceae* plant use and putative bone blowpipe darts between southern Sulawesi and Niah Caves in Sarawak are of uncertain time depth, and the only actual Mainland ISEA involvement in the figure is the distribution of sumatraliths between the Malay Peninsula and neighboring Sumatra. At this point, the figure has reached as far as the Bay of Bengal, but ignores the fact that Sumatra was joined to the peninsula as part of the continental extension of Sundaland until the beginning of the Holocene, 10000 to 9500 BP (Sathiamurthy and Voris 2006). The shared presence of this classic Hoabinhian artefact type may thus represent a residual overland distribution rather than a maritime one, given that the Hoabinhian technocomplex has a greater antiquity in Mainland ISEA than in Sumatra (Ha Van Tan 1997). Even if it were a truly maritime spread, interaction between

opposite coasts of what remained for another two millennia a narrow strait hardly constitutes long-distance maritime interaction.

Even if their flawed terms of engagement can be accepted, the various "interaction spheres" Barker et al. present do not overlap and the only Mainland ISEA link is a single stone artefact type. In addition, they claim the presence of "what appear to be morphologically domestic forms of rice phytolith" in a Borneo pollen core, but having admitted this is not at this stage very certain, they then construct a scenario that "it would not be inconceivable for domestic forms of rice to have reached Borneo from the mainland" at ca. 8000 BP. Moreover, the reason they give is "the scale of population dispersals and resource exchanges linking ISEA and the mainland countries bordering it through the Early Holocene" (all quotations from Barker et al. 2013: 356). Their mention of a pollen grain of Indian mango (*Mangifera indica*) from the same level in the core, usually suggested as being an early second millennium CE introduction from India, hardly inspires confidence in the integrity of the core samples, although they take it as further evidence of long-range Early Holocene interaction.

The final evidence of pathways of exchange from Melanesia to the Bay of Bengal pre-4000 BP is: "Phytoliths of banana in secure Mid Holocene archaeological contexts in West Africa" (Mbida et al. 2000). However, when the original source is examined the dating is 550 BCE; thus, it is irrelevant to pre-Neolithic considerations (see following text). Tearing artefacts out of context from a 6,000-year range (or, in the case of the banana, 7,500 years) and calling this "cross-sea interaction spheres" produces a fantasy of interaction out of the major sampling issue of the spotty and poorly dated distribution of Early Holocene sites in the region but does not advance understanding. It is used only to suggest a spurious degree of continuity with what comes next to play down the obvious degree of difference.

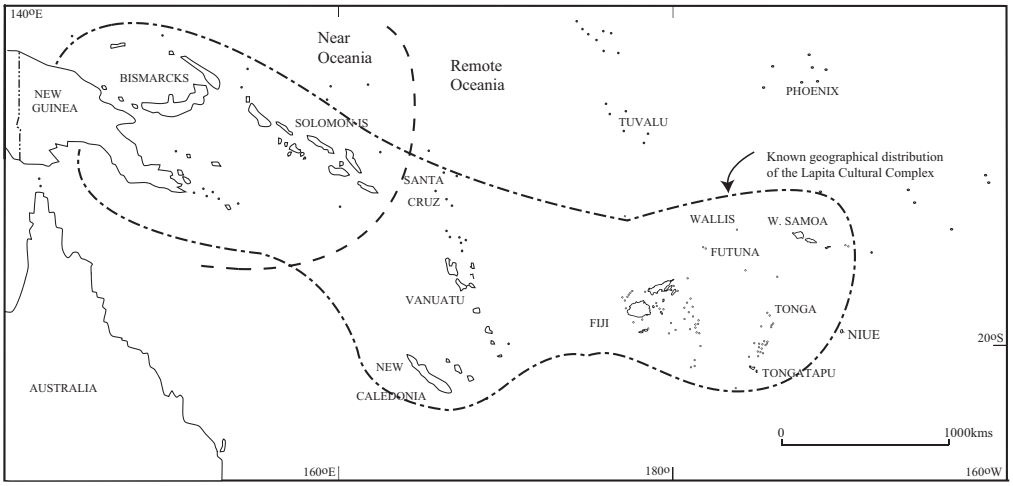
Throughout the ISEA area an Austronesian cultural idiom and shared values soon became dominant after 2000 BCE and these were further transmitted into the Western Pacific (Figure 15.4) to form the basis for many of the cultures of Island Melanesia, Polynesia, and Micronesia (Bellwood 1997 is a convenient summary for ISEA). These influences affected the island of New Guinea but did not supplant, except in some coastal areas, the Papuan-speaking cultures and idioms of the island. Among the ritual practices that spread was the practice of jar burial, found earliest in Taiwan and spreading in this early Neolithic period as far as the Teouma Lapita cemetery in central Vanuatu (Bedford and Spriggs 2007; Valentin et al. 2015). Many other social practices left no discernible material trace but are reflected linguistically among a wide range of Austronesian-speaking groups, suggesting matrilineal descent as an early societal feature and some degree of ranking within family groups (Hage 1998; cf. Allen 1984).



15.4. Map of major Austronesian language subgroups in the Asia-Pacific region (courtesy of Malcolm Ross).

It is not known what languages were spoken in Pre-Austronesian times in ISEA. The eastern regions may have spoken Papuan languages if these do not reflect an eastern-derived later language spread; there are some Papuan languages in Timor and Eastern Indonesia today (Foley 2000). In some cases, they have clearly *replaced* Austronesian languages in the relatively recent past. What is clear is that there was some continuity in Pre-Austronesian cultural patterns in areas such as Sulawesi and Maluku seen in the blade and flake industries that are found both in early and middle-late Holocene contexts (Bulbeck, Pasqua, and De Lello 2000; Spriggs 2003). In addition, the precise chronology of external influences in ISEA is not clear. It is known that the Taiwan-derived Neolithic spread almost simultaneously from the northern Philippines south to northeastern Borneo, Sulawesi, and Timor from ca. 2000 to 1800 BCE. Similar assemblages occur a bit later at around 1500 BCE in Java to the west, and northern Maluku in the east, and spread to the Mariana Islands in Western Micronesia at the same time (Spriggs 2011).

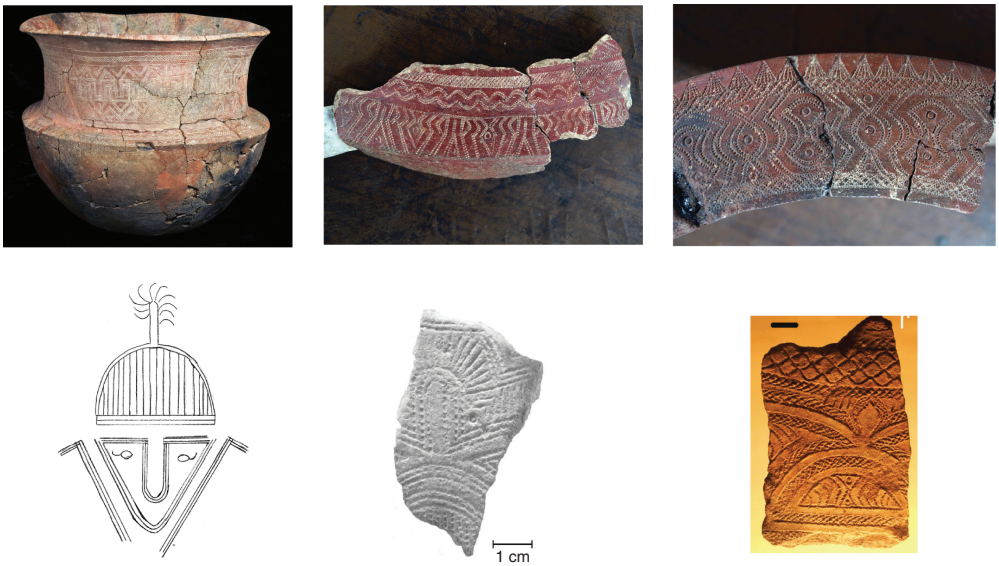
The Marianas would represent a 2,100 km or so direct voyage from areas of ISEA from where it is most easily reached given winds and currents (Winter et al. 2012: 900). Its settlement represents the earliest evidence of deep ocean-capable outrigger canoes as a major regional Neolithic development in boat technology. As far as is currently known, no one else in the world was undertaking open ocean crossings of this length at the time (Carson 2013; Clark et al. 2010; Hung et al. 2011). Perhaps slightly later, a derived culture in Palau in Micronesia and in the Bismarck Archipelago immediately east of New Guinea can be seen. In this latter area, the genesis of the Lapita culture can be seen at about 1300 BCE or later, which then spreads throughout Island Melanesia



15.5. The Lapita Cultural Complex (courtesy of Stuart Bedford).

and into Western Polynesia as far as Tonga and Samoa in one or two centuries around 1000–900 BCE (Figure 15.5). This latter colonization represents a spread of about 4,500 km in less than ten generations (Best 2002: 10), defined by the distribution of a very distinctive pottery style (Figure 15.6). With an initial journey beyond the main Solomon Islands of some 300 km to reach the Reefs-Santa Cruz Group and a crossing from Vanuatu to Fiji of about 800 km, there is further clear evidence of significant voyaging canoe sophistication, with vessels capable of carrying an entire "package" of people, plants, and animals to colonize what, beyond the main Solomon Islands, may have represented a "green desert" without significant wild plant food resources beyond the ubiquitous coconut.

Many years ago, Jonathan Friedman suggested that the Lapita culture represented a prestige-goods system (Friedman 1981, 1982). Indeed, given the rapidity of its spread – which surely outstripped any possible demographic imperatives – it could hardly have been a staple finance system based on intensive agriculture (D'Altroy and Earle 1985; Earle 1997). Lapita prestige goods could have included exotic bird feathers for headdresses as seemingly depicted on Lapita pots; shell ornaments; obsidian (if not a by-product of some other form of interaction – see following text); occasional decorated pots; and fine pandanus mats and/or barkcloth. Intangible prestige goods could have included new rituals and dances, as well as technical and religious specializations – usually the same thing in Pacific cultures – such as canoe making, navigation skills, tattooing, and adze manufacture (Earle and Spriggs 2015; Spriggs 2013). Such prestige goods may have earlier formed the basis of the expansive social system of the ISEA Taiwan-derived Neolithic as well.



15.6. Examples of Lapita pottery, including depictions of possible feather headdresses. Row 1 is Lapita pottery from Teouma, Efate Island, Vanuatu. A is a complete Lapita pot, imported from New Caledonia (photograph: Philippe Metois). B and C are details of dentate-stamped decoration of Lapita pottery. The middle one shows the area above a carination, and the right one is from a rim. Row 2 shows possible Lapita "headdress" designs from New Caledonia and the Bismarck Archipelago with bird plumes. D is a drawing of a Lapita face design with plumed "headdress" from the site of Lapita, New Caledonia (from Noury 2013: fig. 140). E shows a plumed "headdress" from the site of Lapita, New Caledonia (from Noury 2013: fig. 142). F is a variant of the Lapita plumed "headdress" from the Duke of York Islands, Bismarck Archipelago, Papua New Guinea, with a 5-cm scale bar (from White 2007: fig. 27J, sherd orientation corrected). Images courtesy of Philippe Metois, Arnaud Noury, and Peter White; other images by the author.

The mainland Southeast Asian Neolithic spreading down the Malay Peninsula and into Sumatra, western Borneo, and western Java is much less understood and at present has little chronological resolution; in all three areas presumably Austroasiatic languages were replaced at some time by Austronesian ones. As previously mentioned, the early domestic animals of ISEA (pig, dog, and possibly chicken) appear to derive from mainland Southeast Asian sources rather than via Taiwan and so must have been adopted by more immediately Taiwan-derived cultures at an early stage of their spread towards the south and east – certainly by 1300 BCE when they spread into the Pacific and probably closer to 1750 BCE. The arrival of the dog in Australia just before 1000 BCE, the iconic Australian dingo, is a witness to this spread. A dog burial in Timor at 1370–1025 BCE (Veth, Spriggs, and O'Connor 2005) confirms that it was also present in directly adjacent areas of ISEA by that date.

The spread of New Guinea–derived crops into ISEA at present has *no* chronology attached at all. The Taiwan-derived Neolithic, as it moved south, underwent a shift from rice and millet-based crops to at least in part New

Guinea–derived root and tree crops (Dewar 2003), early enough for many of them to be reconstructible in Proto Malayo-Polynesian, the Austronesian language stage encompassing *all* Austronesian languages outside of its Taiwan homeland (Pawley 2002). This linguistic evidence would suggest that these crops (like the marsupials) spread west from New Guinea *prior* to 2000–1800 BCE, with unknown effects on the subsistence of previously hunter-gatherer groups of ISEA. How far across ISEA these eastern-derived crops had spread prior to this date is again unknown, as is local involvement in the domestication of wild yam and taro varieties *within* ISEA.

The spread from Taiwan involved some actual movement of people, but there was later clearly also much local recruitment to the Austronesian cultural idiom throughout ISEA and the Near Oceanic area – that part of Melanesia including New Guinea, the Bismarcks, and the main Solomons chain that had been occupied since Pleistocene times. Moving beyond the main Solomon Islands into "Remote Oceania" (Green 1991), the spread of the Lapita culture represented initial human colonization of pristine landscapes. Similarly, Micronesia had no human settlers before Neolithic ISEA populations reached the Marianas and then Palau just before 3,000 years ago.

The establishment of Neolithic pottery-using cultures throughout ISEA and the Western Pacific, replacing or absorbing low-density hunter-gatherer and/or vegecultural populations, opened up these areas to the rest of the world, and linked-in the previously isolated New Guinea center of agriculture. Connections to China via Taiwan were thus rendered possible as well as wider South China Sea connections, and potentially South Asian connections via the Malay Peninsula. All this was certainly in place by 1500 BCE at the latest, and possibly from soon after 2000 BCE. If the potential integration of ISEA and the Western Pacific into wider networks of interaction is of interest, this is the earliest possible date that can be postulated, coincidentally (or not) the time of the Bronze Age in much of Eurasia. ISEA products identified in India that may have been transferred during this period include sandalwood (*Santalum album*), identified at a site in the southern Deccan in India at 1400–1300 BCE (Fuller et al. 2011: 549) and betel nut palm (*Areca catechu*) on the basis of its linguistic reconstruction to Proto-South Dravidian, believed to have been spoken around 1500 BCE.[3]

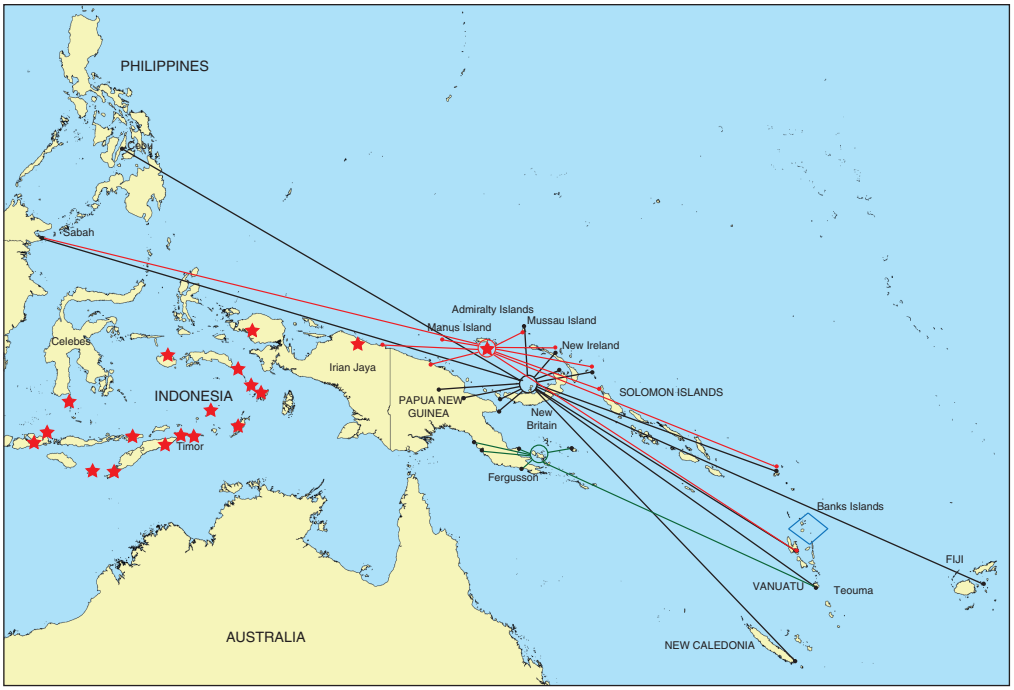
The histories of the westward spread to India and Africa of the New Guinea area crops – taro, yams, banana, and sugarcane – are at present much less known. Fuller and Madella (2009) suggest that there is no definitive evidence in southern China or India of cultivated bananas before 1 BCE on the basis of historical or linguistic evidence. But if the ca. 550 BCE dates for New Guinea–derived bananas in West Africa (Mbida et al. 2006) are confirmed, then a Pre-Metal Age sphere of interaction must be considered as well, presumably via mainland SEA and India, which could have transported not

only banana, but also sugarcane, *Colocasia* taro (first attested in Egypt and the Mediterranean ca. 2000 BP; Matthews 2006), and various species of *Dioscorea* yams. The Mediterranean attestations of *Colocasia* could perhaps equally fit a Metal Age introduction; a much more complete palaeobotany survey across the entire Indian Ocean region is needed.

One sometimes sees citations for the presence of cloves (*Szygium aromaticum*) – an Eastern Indonesian product – at the ancient Syrian city of Terqa in a level dating to 1760–1600 BCE (from Bucellati and Kelly-Bucellati 1977: 116; 1977–1978: 77–79). The dating would indeed fit with the early period of ISEA contact with India and indirectly with areas further west, but it is a single find that has never been examined by palaeoethnobotanists. Areal specialists have tended to dismiss the identification (Carl Lamberg-Karlovsky, pers. comm. 1996, as cited in Spriggs 1998a).

Beyond the preceding examples, the chronology of the spread of ISEA–Western Pacific products to South Asia and ultimately to Africa and Western Asia as well as to China becomes almost entirely speculative (for the Indian Ocean and Africa, see Blench 2010 and Boivin et al. 2013). The Areca ("betel") nut and Betle Pepper (*Piper betle*) complex originated somewhere in the Borneo, Philippines, and Sulawesi area (Heatubun 2009; Zumbroich 2008). The earliest direct evidence in India is textual, but itself subject to ambiguities. Thus, there is a third-century CE Indian text supposedly referring to events around 270 BCE that mentions betel and sugarcane. Another fifth-century CE text that talks of betel is meant to reference events around 500 BCE, but both references could be anachronistic (Zumbroich 2008). The betel complex also spread east at some time to New Guinea and the Bismarck and Solomon Islands, almost certainly during the development and spread of the Lapita culture in 1300–1000 BCE, and to Micronesia (Marianas and Palau) where the earliest claimed dates for supposedly betel nut–stained teeth again suggest that the habit was introduced with the earliest settlers around 1500–1200 BCE (Zumbroich 2008). Betel nut use is proposed on the same basis for Late Lapita skeletons at Watom Island, off New Britain said to date to 750–550 BCE (Kinaston et al. 2016). Further geochemical research on human teeth is needed to establish the earliest dates for betel nut staining however – the stains can be confused with those deriving from other substances.

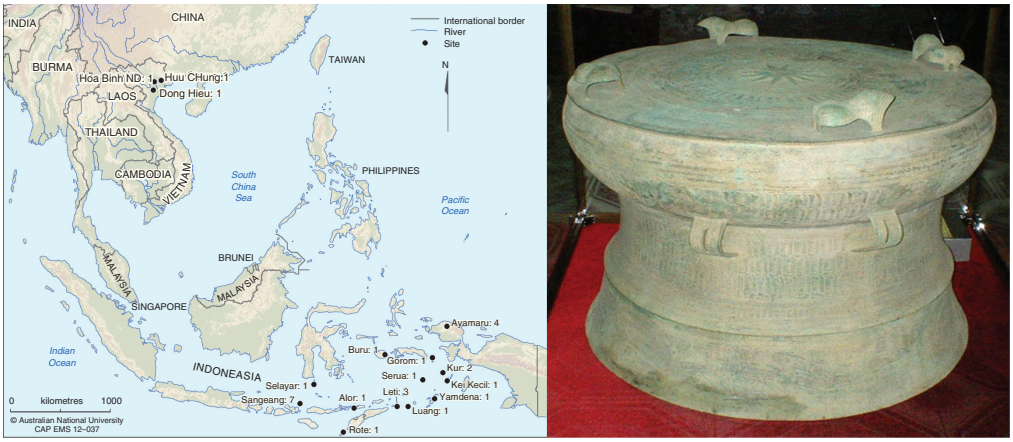
There is direct evidence linking the Lapita culture of the Bismarck Archipelago and ISEA or near-ISEA areas around 1000 BCE. A jadeitite artefact from an early Lapita site on Emirau (Mussau Group, Bismarck Archipelago) has been sourced to the north coast of western New Guinea (Harlow et al. 2012). The distribution of Bismarcks' obsidian from sources in West New Britain and Manus is far more impressive, however (Summerhayes 2009). West New Britain obsidian has been found at Bukit Tengkorak in Sabah, Northwest Borneo, dating to just beyond 1000 BCE, along with a single piece of Manus



15.7. The distribution of obsidian in the Western Pacific and Island Southeast Asia ca. 1000 BCE showing the Admiralty Islands (Manus), New Britain, Fergusson Island, and Banks Islands sources. The red stars represent the distribution of Dong Son drums and associated bronze artefacts in the early centuries CE (adapted from an original map courtesy of Wal Ambrose).

obsidian a few hundred years later (Bellwood and Koon 1989; Chia 2003). West New Britain obsidian has also now been found on the surface of a Neolithic site on Cebu in the central Philippines (Reepmeyer et al. 2011). This find is the more remarkable as there are obsidian sources on many of the major ISEA islands (Spriggs et al. 2011), and both Cebu and Bukit Tengkorak have also produced obsidian finds from such ISEA sources.

West New Britain obsidian is one of the most widely distributed resources in any Neolithic context worldwide (Figure 15.7); it was also distributed to the south and east as far as New Caledonia and Fiji in Island Melanesia during Lapita times around 3000 BP – giving a total distribution range at that time across more than 6,000 km (Summerhayes 2009: 116). These latter finds might represent a few pieces transported by the initial Lapita colonizers of those islands but obsidian occurs in some quantity across the Lapita culture as far south as central Vanuatu, distributed over a period of perhaps 200 years (Reepmeyer et al. 2010). It is important to note that this network rather dwarfs that of the Mediterranean region: The Tyre to Gadir run is 3,200 km. The obsidian distribution, however, could in part be incidental to something else, the movement of skilled tattooists perhaps. Rare, specialized "gravers" found in



15.8. Example of Dong Son drums and their distribution from Northern Vietnam to Eastern Indonesia and New Guinea. The drum is from Hoa Binh, northern Vietnam (courtesy of Ambra Calo and first published in Calo 2014. Copyright ANU College of Asia and the Pacific, CartoGIS).

Lapita contexts appear to have been used for tattooing by piercing skin with an application of charred plants or mineral pigments, which have been found mixed with blood on their retouched points (Kononenko 2012).

Metal Age

Dates as far back as 500 BCE have been suggested for the spread of metal (bronze, iron) artefacts and metalworking, and Indian-derived carnelian, agate, and glass beads into ISEA, signaling the start of the ISEA Metal Age. But reliable dates only really start around 300–100 BCE and the spread of metal seems instantaneous across a region from Taiwan to Manus (Admiralty Islands) in the Bismarck Archipelago at that time (for the latter see Ambrose 1988). There are, however, some significant precursors to this spread in terms of shared pottery types going back to at least 750 BCE across the South China Sea, and perhaps even back as far as 1500–1000 BCE (Hung et al. 2013).

Very soon afterwards, three separate Metal Age trade networks can be identified operating in the region. The first, marked by the movement of Dong Son bronze drums (Figure 15.8), starts in northern Vietnam/southern China, spreads through mainland Southeast Asia, and some way along the Lesser Sunda island chain of Indonesia at around the turn of the Common Era (Calo 2014: ch. 2). Access to alluvial gold deposits in Borneo may have been one of the reasons for the exchange network's further extension beyond mainland Southeast Asia via Sumatra and Java (Calo 2014: 71). It could have connected with more locally focused networks extending further east to Maluku and New Guinea, which became more international

in focus over the following centuries as shown by evidence for a second distinct network.

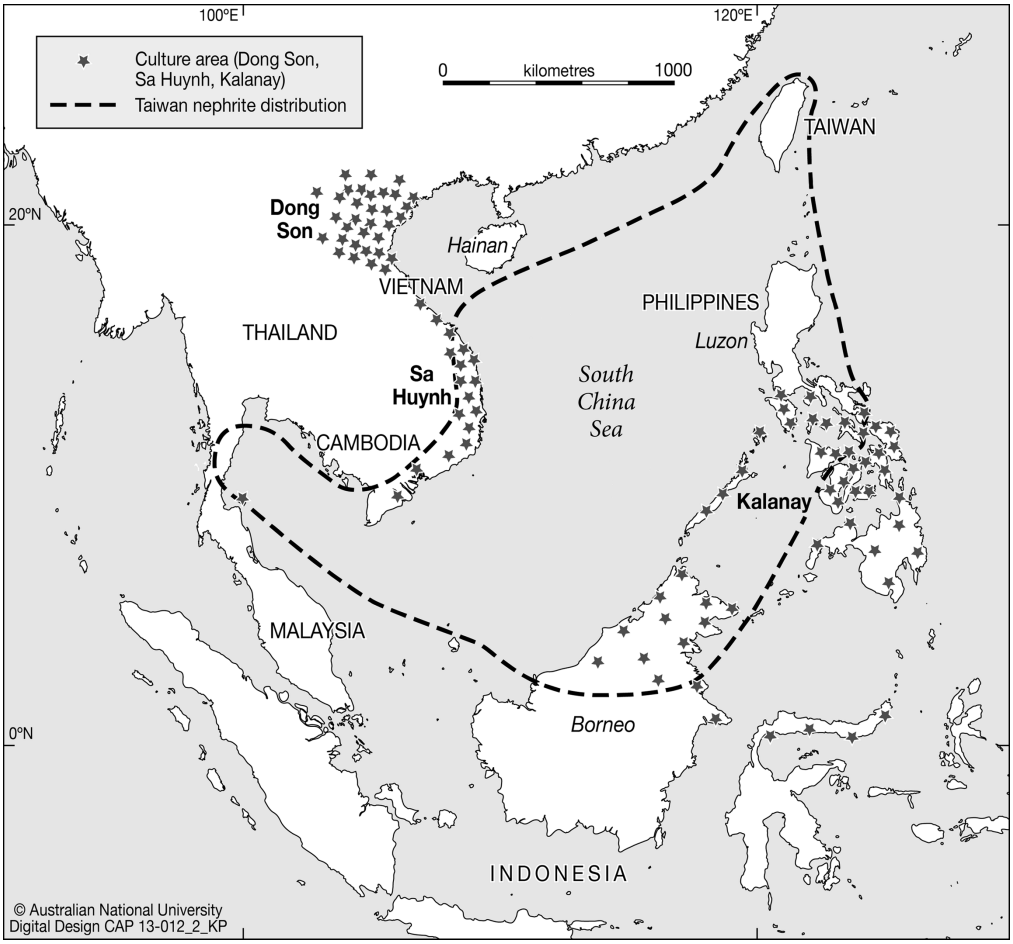
This second network, commencing somewhat later, runs from northern Vietnam via sea routes directly to the "Spice Islands" of Eastern Indonesia and ultimately into western New Guinea (Figure 15.8; see Calo 2014: ch. 3; Kempers 1988; Spriggs and Miller 1988). The large Dong Son drums, at least one of which from the Kei Islands in Maluku sports a Chinese, possibly Buddhist inscription, were clearly very high-status items, and can perhaps be seen as diplomatic gifts securing trade routes through the region in the early to mid-first millennium CE.

This distinctive distribution of stylistically homogeneous drums suggests a targeted dispersal at some time soon after their production in the second to third century CE. While individual drums may have been moved from their original port of call in the centuries since that time, the broad distribution clearly relates to a single period and purpose. I cannot follow Calo (2014: 108–109, 114) in seeing them as having been redistributed along locally focused exchange networks perhaps reaching into the thirteenth to sixteenth centuries CE; instead, it would seem more likely that they represent what on face value they are, a concentrated first millennium CE effort to establish exchange links from northern Vietnam directly to the "Spice Islands" and New Guinea to secure high-value spices and other local products found uniquely in those areas.

A third exchange network is marked by the distribution of Taiwanese nephrite and associated artefact types (Lingling-O and animal-headed pendants) and Mindoro "jade" (a muscovite) from the Philippines spreading to mainland SEA (Figure 15.9) and particularly associated with the Sa-Huynh–Kalanay pottery complex (Hung and Bellwood 2010; Hung et al. 2013). In the other direction went siliceous and glass beads ultimately of Indian derivation. There was clearly overlap/connections between the networks in mainland Southeast Asia, with Dong Son drums and Han Chinese mirrors being found in Sa-Huynh sites in central and southern Vietnam. If the various ISEA and New Guinea crops had not already reached India before this phase, then this is also the time they spread to the west, to be attested in Africa and the Mediterranean by around 1 BCE.

Han Chinese sources list gold and silk exports to the lands around the South China Sea, receiving in return glass-making materials, crystal, agate, rhinoceros horn, aromatic woods, and spices (Hung et al. 2013). These products may have been transported primarily via the two ISEA Dong Son-associated routes.

The earlier-mentioned suggestion of Moluccan cloves at the West Asian site of Terqa in 1760–1600 BCE is dubious, but secure Chinese sources specify ritual use of cloves in second-century BCE Han times; this might suggest that the Dong Son–associated trade network from mainland Asia to Maluku – the



15.9. The distribution of Taiwanese nephrite in Metal Age sites in Island and Mainland Southeast Asia (courtesy of Hung Hsiao-Chun, and first published in Hung et al. 2013: fig. 2. Copyright ANU College of Asia and the Pacific, CartoGIS).

unique source of cloves (*Szygium aromaticum*) and nutmeg (*Myristica fragrans*) – and beyond to New Guinea was the source and initiator of trade in these particular spices (Spriggs 1998a). There are first-century CE references in northern India both to cloves and nutmeg (Zumbroich 2008: 118; cf. Beaujard 2010: 32).

The evidence of Dong Son drum distribution beyond Maluku into New Guinea suggests that forest products were part of the network, with Bird of Paradise plumes a likely candidate as one very significant resource (Swadling 1996). Indeed, are such plumes the ones illustrated on many of the Dong Son drums? These exchange networks passed through the regions that almost immediately fell within the South Asian Hindu-Buddhist sphere of influence, and thus provide the first definitive evidence for significant ISEA-South Asian

interaction. GES's earlier-quoted remarks about the spread of religions should be kept in mind.

The scale of exchange across the ISEA region around 1 BCE suggests at least a partial integration with the emerging single Eurasian-African world system (identified by Beaujard [2010] from this time) for ISEA and its New Guinea margin, and political economies that made it possible to carry out long-distance travels and trade protected by treaties and other institutionalized forms of social and political guest-friendship (Kristiansen, this volume). Clearly, the boats capable of making Indian Ocean crossings via India were around in the ISEA-Western Pacific region from the earliest Neolithic phases, and, indeed, Austronesian-derived canoe technologies were spread from ISEA to parts of India and East Africa at some unknown time (Fuller et al. 2011).

As mentioned, in about 300–100 BCE, the spread of metal, particularly bronze, was archaeologically instantaneous across ISEA and extended as far as Manus in the Bismarck Archipelago. Dong Son drums have been found in the Bird's Head of western New Guinea from the early centuries CE (Elmberg 1959), and caches of bronze ceremonial daggers of Dong Son style are known from the Lake Sentani area on the north coast near present-day Jayapura close to the Papua New Guinea (PNG) Indonesia border and elsewhere in western New Guinea (see references in Wright et al. 2013).

OUTSIDE THE SYSTEM? THE PACIFIC IN THE SUBSEQUENT 1,500 YEARS TO EUROPEAN CONTACT

It should be remembered that the Manus bronze find is a single piece, while Neolithic patterns of technology continued in present-day PNG and the greater Pacific region until significant European contact in the nineteenth century CE. The western half of New Guinea continued to participate as a periphery of Hindu-Buddhist and then Islamic trading kingdoms (see Spriggs 1998b), but the rest of Melanesia and the Pacific was very largely beyond the periphery until the modern era.

This represents a significant closure, as for a period around 1000 BCE there was significant interaction across the region. Villages in Island Melanesia and Western Polynesia may have been very like those communities in ISEA speaking related Austronesian languages and sharing a similar set of cultural idioms and values. However, the Metal Age trading systems linking to China in the North and South Asia to the west, while engaging with the coastal regions of the western half of New Guinea, felt no need to extend their reach any further east for much of the Common Era. There is at present very little hint of any sustained interaction between eastern-focused local exchange networks of the north coast of what is today PNG, and the western-focused ones of what is now Indonesian-controlled Papua.

One might presume that ISEA traders would have been able to establish that there were no additional attractive resources to be had further east along the New Guinea coast; they could get all the products they desired from the western end of New Guinea. It is in fact true that as one moves east beyond New Guinea, the number of natural resources apart from pearls, pearlshell, and other marine products decreases rapidly as one moves away from that continental island, joined to Australia as the continent of Sahul until the early Holocene.

The Aru Islands in eastern Indonesia were also once part of the same continent of Sahul, and have a similar continental fauna of Birds of Paradise and a wide range of marsupials and other exotic creatures that helped supply the trade in forest products. It is no coincidence that the Aru group became known to the Portuguese very soon after they established their Malay Peninsula base at Malacca in 1511 CE (see O'Connor, Spriggs, and Veth 2005). It functioned essentially as New Guinea, without having to go to the real thing; what could not be provided from there could be brought in along more local trade routes to centers such as Ujir, important in the later Islamic period of influence (Veth et al. 2001). Nearby Banda and other parts of Maluku were never joined to Sahul, but had their own very special and much sought-after products: the previously mentioned cloves and nutmeg. Timor had sandalwood and copper, the latter of unknown exploitation date.

The northern coasts of Australia were to become involved in the world system around 1600 CE with the exploitation by Macassans from Sulawesi of the abundant Trepang ("sea slugs" or bêche-de-mer) found on their reefs for export to China (Clark and May 2013). However, there is little evidence of earlier Australian contact from ISEA beyond the Neolithic introduction of the domestic dog, to become the iconic Australian dingo.

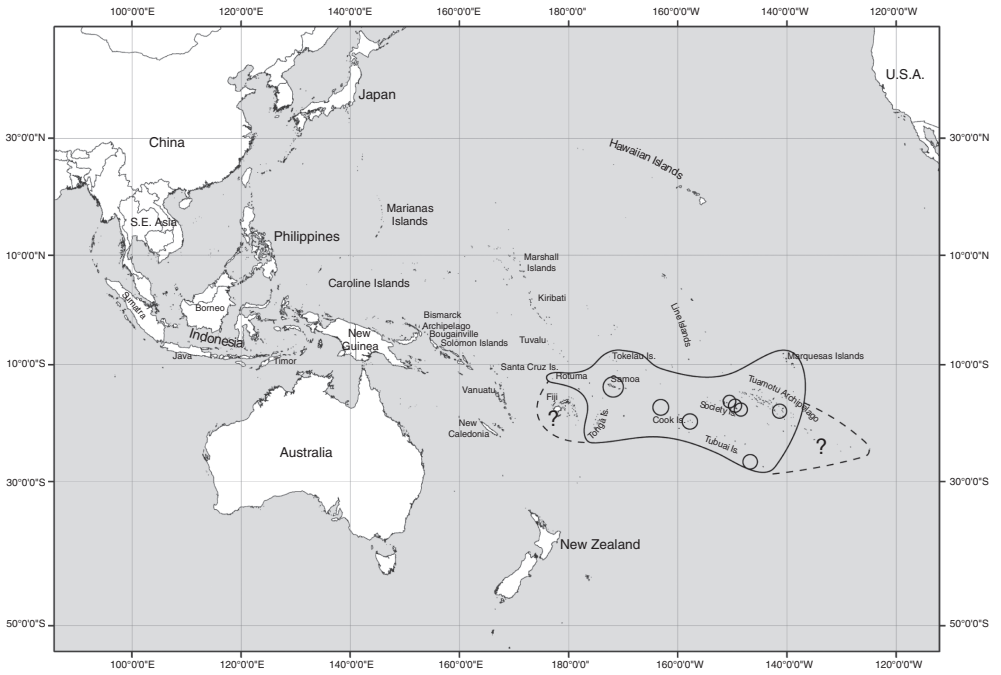
While New Guinea and the Bismarck and Solomon Islands are rich in gold and copper, the discovery and large-scale exploitation of these minerals had to await the twentieth century. E. W. P Chinnery, a government official in the early twentieth century in what was to become PNG and a fan of W. J. Perry, tried to argue for earlier access by the "Children of the Sun" to interior gold resources in New Guinea (Chinnery 1919). But his putative stone gold crushers are now known to belong to a pre-Lapita, early to mid-Holocene culture utilizing highly decorated stone mortars and pestles as part of a ritual complex distributed across New Guinea and the Bismarck Archipelago and possibly associated with the early spread of agriculture in that region (Swadling and Hide 2005; Swadling, Wiesner, and Tumu 2008). Rich pearl beds are found across ISEA as Perry recognized; again, there was no need to go further afield into the Pacific to access sufficient supplies.

There is, however, another possible scenario to consider for the lack of extension of regular Metal Age interaction beyond Western New Guinea: local

choices made by the communities that the traders would have had to interact within the region. The latest Lapita and immediately post-Lapita sites across their entire distribution show a relatively sudden and almost complete cessation of evidence for interisland exchange from around 800–700 BCE beyond the Bismarck Archipelago. The communities turn inwards, beginning to exploit island interiors where the first inland sites start to appear. There is perhaps no coincidence in the fact that this occurs with the end of the Lapita expansion to the east. Whatever had driven that expansion and the network that it established was over. Once expansion ceased and communities were less precariously established on the islands, there was perhaps a refusal to engage in long-distance interaction that no longer made sense in changed local circumstances. Lapita hierarchies appear to have collapsed (see Spriggs 2013 for details of these "devolutionary" processes).

When hierarchical systems reappear in the western and central Pacific, they appear to have generally been based on staple-finance systems rather than prestige goods. That is not to say that as more hierarchical systems established themselves across the Pacific they did not engage in long-distance interaction. By the time of significant European contact in the eighteenth century CE, there were a series of overlapping interaction spheres in the Pacific that potentially allowed ideas and technologies to spread across the entire area – a third of the world's surface – always with the potential for leakage in and out of the region to and from ISEA and even the Americas: the sweet potato/gourd and chicken "interchange" is an example of leakage involving the latter area.

Tupaia's "chart," redacted by Captain Cook in 1769 CE, displayed a single specialist Tahitian's geographical knowledge at the moment of European contact (Di Piazza 2010; Di Piazza and Pearthree 2007), covering an area 4,700 km east to west in the eastern and central Pacific (again the Tyre to Gadir distance appears a bit paltry). Such distances were not being covered by single voyages or voyagers at the time and may have in part represented ancestral knowledge from a period of colonization and two-way voyaging about 500–700 years earlier. It may be better to talk of a "sphere of knowledge" rather than an interaction sphere in this case. The "chart" has recently been deciphered by Di Piazza and Pearthree as a set of "island compasses" incorporating sailing directions based on at least eight starting islands in eastern and western Polynesia (Figure 15.10). Tupaia was not unique in his wide geographical knowledge at the time. Anderson, who was with Cook in 1777 in Tonga, was given the names of 153 islands "in that neighbourhood" by various individuals, which included two or three islands in Kiribati and Vaitupu Island in Tuvalu some 1,600 km to the northwest (Cook and King 1784: 367–369; Geraghty 1994). There is some overlap in the two lists but the latter included only those islands claimed to be under the suzerainty of the Tongan polity, not necessarily the entirety of Tongan geographical knowledge.



15.10. Map of the Pacific showing the extent of geographical knowledge shown by Tupaia's "chart," with identified island compasses marked (information from Di Piazza and Pearthree 2007 and Annie Di Piazza, pers. comm., May 2014). The areas marked with dashed lines in the Fiji area and in the Southern Tuamotus-Gambier-Pitcairn area are suggested less certainly as also being indicated on Tupaia's "chart" by Di Piazza and Pearthree (2007: 335).

Tahitian interaction spheres were soon to expand more. Tupaia was taken on board by Cook, visited New Zealand where his own eastern Polynesian language was sufficiently close to Maori that he could make himself understood, and he died in what is now Jakarta in Indonesia, at all times able to place himself accurately in relation to his Tahitian home. Another Tahitian noble, Omai, cut a fine figure in London between 1774 and 1777 before heading home, and in 1815, two Tahitian warriors – in an echo of Eurasian Bronze Age mercenary warrior practice – got involved in a local European dispute far from home; they are recorded as fighting on the British side at the Battle of Waterloo (Tagart 1832: 284–292, cited by Lewis 1972: 29). By then, clearly even the remote eastern Pacific was intimately enmeshed in the single Afro-Eurasian world system!

For the period after 1000 CE when Eastern Polynesia was first settled, there is also direct evidence of long-distance movement of archaeologically durable items within the Pacific. Samoan stone adzes from the island of Tutuila have been recovered in the Cook Islands, 1,600 km away. Other dated examples have been recovered from Fiji and Tokelau and undated surface finds in the Southeast Solomons (Weisler and Kirch 1996). Tahitian adzes and a Marquesan

example have also been recovered in the Cook Islands (Allen and Johnson 1997; McAlister, Sheppard, and Allen 2013). As the Tuamotu islands to the east of Tahiti are all coral atolls, basaltic adzes found there must all have come from somewhere else. A restudy of museum collections from these atolls, which became habitable only in the 1200–1500 CE period, demonstrated connections to a wide range of places: Pitcairn Island to the southeast, the Australs to the southwest, Tahiti to the west, and the Marquesas to the northeast. One adze was sourced to Kaho'olawe in the Hawaiian chain, some 4,040 km to the north (Collerson and Weisler 2007).

CONCLUSIONS

One contention of this chapter is that the arguments of GES and Perry are perhaps not as easily dismissed as they have been and that it is not embarrassing to see them as precursors to the kinds of arguments found in this volume. For instance, the importance of the spread of religions, or at least sets of ritual practices as part of global systems, was recognized early on by GES and is now being enthusiastically taken up by some of the participants at the Gothenburg conference.

For those working in areas not traditionally considered significant in discussions of early world systems, it is important to be aware of the tendency for "urban-state envy" and to curb any enthusiasm for claiming exaggerated centrality for a chosen region. That said, there *is* evidence for significant participation of these neglected regions in food globalization and other world systems networks. In this chapter, evidence has been presented for parts of ISEA and the Western Pacific, while stressing its limits given the current state of research. There is certainly an important contribution of the ISEA and Western Pacific regions to "food globalisation" (M. Jones et al. 2011): banana, sugarcane, taro, various yam species, cloves and nutmeg, and the betel nut complex are the species in question. How these regions articulated with the "classic" east-west nexus of Eurasian Bronze Age and later world systems is at present unclear, as is the nature of the social structures that may have allowed them to do so.

This chapter shows how spheres of interaction, and perhaps even more widespread spheres of knowledge operated across the third of the world's surface that is the Pacific Ocean in the centuries prior to European contact. There were on occasion "leakages" to both east and west, some of which were economically critical, such as the diffusion of the sweet potato from South America into Eastern Polynesia. At the western edge of the Pacific in the New Guinea region, these spheres were to some degree open to the wider Eurasian global systems and had been to a greater extent in two earlier periods: 2000–1000 BCE during the spread of Neolithic cultures and again in the centuries around the BCE/CE turnover, witnessed by the spread of metals.

The first period saw the settlement of the Western Pacific beyond the main Solomons chain and ultimately led to the settlement of the entirety of Polynesia and Micronesia. Interaction in the second period did not spread further than Manus in the Bismarck Archipelago, and there even metal was only of a most fleeting interest. After that moment, ISEA and the Pacific diverged in their economic and social trajectories and the two regions remained largely outside of each other's histories until post-Columbian times.

The Pacific scenario outlined in this chapter can hardly be said to mark any degree of agreement with the arrows on the maps of GES and Perry for the region. But, by thinking globally, it certainly becomes easier to act locally in terms of framing research agendas that are aware of the sociopolitical implications of the kinds of long-distance interactions to which they initially did much to alert people. We should not be afraid of claiming them as intellectual ancestors in these endeavors.

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NOTES

1 But see Gongora et al. (2008) and most recently Thomson et al. (2014) for dissenting views.

2 I follow Beaujard (2010: 9n21) in defining spheres of interaction as "when exchanges in an area do not produce a significant transregional division of labor (unlike a world-system)."

3 Fuller et al. (2011) added the coconut to the transplanted crops but Gunn, Baudouin, and Olsen (2011) make it clear that Indian Ocean forms are distinctive to that region and native to it (as recognized by Boivin et al. 2013).

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SIXTEEN

TRADE-LIGHT: THE POLITICAL ECONOMY OF POLYNESIAN AND ANDEAN CIVILIZATIONS

Timothy Earle

The premise of our conference sets the stage: "One of the most enduring analytical structures of societies is the one between trade and civilization." Although the link between trade and civilization is profound for the world systems of Eurasia and Africa, I argue that, prior to colonial expansion, trade was much less important for the emergence of civilization in several major world areas including Eastern Polynesia and the Andes. Why is the significance of trade so variable? The answer requires an explicitly comparative approach that needs a theoretical framework and careful measurement of key variables.

My analysis of the contexts where trade was of little importance to the growth of civilization illustrates an alternative pathway toward state societies, but, surprisingly, these countercases also show striking similarities in their structuring processes to define a new ruling class. A primary similarity is the incorporation of symbolically charged exotica that, although often obtained by long-distance trade, can as well be fabricated locally. Although the pathways to civilization were quite different, the political economic processes appear to have been similar.

I begin with a few definitions. *Civilization* comprises the culture of complex, statelike societies. It involves the creation of high art produced by specialists, which include craftspeople, architects, and priests. Civilization, as high culture, is associated with an emergent social stratification and ruling elite. It also involves power specialists, including warriors and police, responsible for

maintaining the structure of inequality and the political economy of institutional finance, and priests, responsible for maintaining a legitimizing ideology. *Trade* involves the systematic movement of high volumes of commodities by independent and administered agents across long distances. Trade is created by differential availability and costs of raw material, by regional specialists with superior skills and technology, and by a reasonable means of transport that make it desirable in terms of the principle of comparative advantage to move commodities internationally (Earle et al. 2015). Extensive trade can lead to world regions being differentiated as producers of different commodities, integrating core regions across Eurasia and African. But, as I argue, this trade was not a necessary condition for state societies and their civilized lifestyles.

Using a political economy approach helps us understand how stratification, central power, and civilization link to trade. Within the general economy, the *political economy* involves channeling economic flows to mobilize a surplus used to support power (Earle and Spriggs 2015). Key is a multiscalar approach, in which the general conditions of international trade set up opportunities for local control that finance social stratification. Segments of local populations can gain political advantages from their particular articulation within the political economy, and their distinctive class status becomes elaborated by high culture. In this case, it is critical to understand the appropriate multiple scales of analysis. While world systems must be understood as broadly integrative flows and regional specializations, the way that individual regions interact with the trade create very distinctive political strategies of power. In the words of the famous American politician Tip O'Neal, "[A]ll politics are local." To understand the social significance of trade, we must look at how trade plays out locally. Galaty (Chapter 6, this volume), for example, shows that city-states in the Aegean could be articulated quite differently with increasing trade through the Mediterranean and that these differences were foundational to the political economies of the local regions.

To answer the question concerning the rise of civilization, an examination of how local control over the political economy produced social stratification as an outcome of patterns of production, trade, and consumption must be undertaken. My argument makes the following points: First, although undoubtedly complicated, the evolution of civilization requires control over a political economy to support institutions of power and to create a class-based ideology of distinction. Trade was certainly critical in some (perhaps most) cases of the rise of civilizations, but not all. Second, the relative importance of trade must be studied comparatively with measures of volume, commodity types, and means of transport. These measures show the potential mechanisms and choke points that can make trade more or less important for the emergence of political complexity in one local context versus another. For different political developments, I recommend a microregional approach to study local

variation in such variables as social stratification and political centrality (Earle et al. 2015).

The prehistories of the Hawaiian Islands and of the Andes provide countercases to investigate the relationship between trade and civilization, showing that complex societies could be formed with little or no international trade. My thesis is perhaps counterintuitive: The significance of trade in the evolution of civilization is its local, not its international, relationships to power. Without high-volume trade or really much trade at all, states were able to fashion similar outcomes of wealth concentration, social distinction, and political centralization that characterized the Eurasian and African world systems.

THE POLITICAL ECONOMY AS A THEORETICAL FORMULATION

"Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history" (Engels 1883). As studied by Marx and Engels, the political economy is the structuring of the general economy that channels resource flow (food, labor, wealth, and weapons) to support power strategies. In his analysis, the mode of production included both "the means" (technology) and "the relations" (property rights) of production so as to position the capitalist class dominantly. To simplify Marx's analysis to one that can be applied across human history, a factor responsible for emergent social stratification and its association with "civilization" appears to have been the creation of commodity chains with controllable bottlenecks (Earle and Spriggs 2015).

A commodity chain is "composed of the stepped sequence from initial resource extraction, to manufacture and assembly of components, to the global distribution, and ultimately to local consumption" (Earle 2010: 210; Earle et al. 2015). Bottlenecks are restrictions in transformation and flow in commodity chains that create opportunities for control by ruling segments (classes). Bottlenecks emerge both as unintended consequences of intensification and specialization and as intended consequences of elite power strategies. The development of central power rests on an ability to direct economic flows by dominating such choke points as technology, irrigation systems, or limited routes of movement. The selective mechanism consists of the variable potential in different societies for an emergent social class to divert a surplus for political uses. By using particular controllable exotica to represent class status, for example, allows elites to manufacture meaning of their distinction.

Analyzing local prehistoric sequences from a political economy perspective begins with the concreteness of the general economy and how it changed. Firstly, the things that mattered most in the subsistence and social economies of a society are identified. Thereafter, the specific commodity chains

are examined to identify potential bottlenecks that allowed controlled access. Based on the spectrum of different options, the political economy can be based either on local (internal) or on distant (external) resource flows. The spectrum of access from highly local to more distant sources of wealth and power in the political economy suggests what Blanton et al. (1996; Blanton and Fargher 2008) call the range from corporate to network political strategies.

The early complex societies (chiefdoms and states), which appear to have emerged worldwide, were typically based on local strategies involving highly productive landscapes supporting the mobilization of staple surpluses. Chiefs and kings used locally produced staples to support elaborate ceremonies, craftspeople, and public works projects that included agricultural facilities such as irrigation and terracing. In addition, a monumental landscape provided an elaborate arena for ceremonies and the definition for an overarching property system, as described for the Hawaiian chiefdoms/states. These systems were fundamentally local, for which trade was initially of little importance. They relied predominantly on a group's ownership of land, which was made productive by community labor organized to some degree by a central authority. Emerging leaders mobilized production of local staples to support their institutions of management and rule, but the authority of leaders was balanced by the value of local labor and the community's association with its land.

Trade in high-end items was also of significance for the emergence of some chiefdoms and states and for the continuing elaboration of complex societies originally based on local staple mobilization. These items, including prestige goods of dress and bodily decoration, weaponry, and heirlooms, served to define social relationships involving personal identity, group membership, social networks, political ideologies, and religious institutions (Kristiansen 1987, Chapter 4, this volume). Prestige goods were symbols of distinction and associated magical power. Such objects of power could be made from local (immediately accessible) materials or from nonlocal materials (available only through trade or travels), but there were radically different opportunities for control in the use of local versus nonlocal materials (Earle 2004). In general, objects, which had to be moved over great distances, especially across water, had more potential bottlenecks for control. With the emergence of social hierarchies, prestige objects often shifted from goods that were locally available (such as amber beads or flint in Denmark) to those made from foreign materials like copper and tin. For example, the shift from Neolithic flint daggers and stone axes to bronze swords, halberds, and spears created a new technology of warfare and a medium of warrior expression that required long-distance exchange, which in turn provided new potential for control by local chiefs (Earle 2004).

As staple-based states developed increasingly complex institutional forms, elites often became reliant on foreign exotica obtained through trade. Although the civilizations of Mesopotamia, Egypt, the Indus Valley, and Asia

initially relied on internal mobilization of staples from intensive agricultural systems, external sources of revenues from trade and conquest came to increasingly dominate their political economies (Barjamovic, Chapter 5, this volume; Warburton, Chapter 3, this volume; Beaujard, Chapter 9, this volume). Alternatively some states, such as the Greek and Phoenician city-states and those along the Silk Road (Galaty, Chapter 6; Monroe, Chapter 8; Whitfield, Chapter 10 – all this volume), appear to have been initially established primarily based on control over bottlenecks in international trade. Theoretically, states derived revenues from an infinitely variable mix of local and distant sources that would be fashioned creatively according to particular opportunities for control that existed. But to what degree was trade essential for studying the emergence of civilizations? This empirical question requires some reasonable quantification.

STUDYING TRADE IN PREHISTORY FROM A POLITICAL ECONOMY PERSPECTIVE

How important was trade for the development of civilization? This is a comparative question that requires both a means of quantification and a set of independent cases to evaluate theoretically. Trade should not be viewed as a presence or absence trait because all societies in prehistory and during the historical period of traditional ethnography were involved in "trade" (movement of distant objects) to some extent.

Since at least the Upper Paleolithic, such trade in special materials has taken place. Fairly extensive trade in obsidian existed among the prehistoric and historic Californian hunter-gatherers (Ericson 1981), and stone axes were extensively traded among the Australian aborigines (McBryde 1984) and the Papuan horticulturalists (Hughes 1977). Although some trade characterized all human societies, the amount of trade and its significance were variable, and its specific role in the rise of social complexity should be carefully considered. The introduction to our symposium emphasized how the emergence of civilization across Eurasia and Africa was foundationally based on distant cultural relationships. Although this assertion is demonstrably true for the times and places considered, each region should prove to be somewhat different in how international relationships served to define social structures and particularly how trade provided potential revenue sources in the political economy.

In arguing for a political economy perspective for understanding trade's effect on institutional relationships of power, specific local articulations with international flows should be considered. This political economy approach requires an assessment of how commodity chains could be controlled at the local level to support the development of particular political and ideological

systems (Earle et al. 2015). To make sense of the variability in trade, the following steps to describe trade and its potential bottlenecks for control should be used:

1. *Definition of Socially Significant Objects for a Particular Time and Place.* To understand the political significance of such objects, the specific social contexts of their use (burial or other ritual context versus elite and commoner household consumption) need to be determined. The nature and context of prestige objects aid in the understanding how the control (or lack thereof) of objects affected the formation of particular social institutions.
2. *Volume*. The nature and importance of trade depend entirely on volume. Although small amounts (such as reliquary items) could be of great ritual importance, direct control in the trading process required sufficient volume so that control of trade in that item would be managed. In small amounts, any object could be traded hand-to-hand in a down-the-line network, while higher volumes required bulk transport often involving specialist traders and warriors to protect the goods. The best way to measure volume is weight estimates (kilograms of obsidian or copper, e.g.) for goods flowing through trading systems. Easier ways to measure trade include estimates of counts (numbers of objects) or percentages (e.g., of ceramics or other materials) coming from regional (15–50 km) versus long-distance (> 50 km) sources. Too often trade is identified based on the occurrence of a few objects in specific ritual contexts; for a political economy approach, systematic trade of particular types of goods must be demonstrated.
3. *Transport Routes*. Routes of transport with high volumes along specific corridors would have had effective bottlenecks; in contrast, diffuse pathways and low volumes would have been virtually impossible to control. The graphic representation of these routes is comprised of networks, displaying the number of alternative routes available. Potential bottlenecks in such trading networks include major rivers, mountain passes, and desert oases – points in routes where passage was channeled, ownership over the route segments established, and tariffs extracted. Describing the distribution patterns of traded objects can describe such routes, such as, for example, the concentration of metal items along the major rivers of Europe during the Bronze Age (Kristiansen 1998). Bridges, roads, and temporary housing can document probable routes. Specialized architecture, such as storage facilities, for trade goods, also documents nodes of trade (see DiPeso 1974).
4. *Transport Technology*. The primary ways to transport goods in prehistory were by human backs, beasts of burden (donkeys, horses, camels, and llamas), and boats (canoes and plank boats with sails and/or oars). These transport technologies can be ranked from lowest to highest in terms of their required capital investment and thus the ease by which their ownership might create a potential bottleneck. Human backs represent little capital investment and, therefore,

any number of traders could participate. In contrast, the greater investments required to build and to maintain trading vessels meant that wealth accumulation was necessary. In some cases, such as the Middle Bronze Age Dover oak-plank boat, the means of transport can be directly recorded; therefore, it is possible to analyze the amount and type of labor involved in both the building and manning of the craft (Helms 2009). Boats and other means of transport have also been documented in rock art and other media. However, the most common way to infer transport technology is indirect, based on the transport required to move along known routes. One example is the sailing canoe that the Lapita must have used to travel between distant Pacific islands (Spriggs, Chapter 15, this volume).

5. *Transport Personnel.* Who moved the goods? Were they individuals or groups? Did they work full-time or part-time? And for whom did they work? On the whole, the number of traders and their affiliations affected whether they worked as independent agents or state personnel. Information about trading personnel is often based on historical documentation or ethnographic analogy (see Oka, Chapter 11). Trading colonies have been identified especially late in prehistory and include, for example, the Bronze Age Uruk traders at Hacınebi (Stein 1999). The distribution of Bell Beaker settlements along the water transport routes of Europe provides reasonable documentation of traders (Childe 1951). Traders attached to ruling institutions or their chiefs would have been most easily controlled by an elite sector. Independent traders would have operated as free agents, but their profits could have provided revenue for states, which were able to tax movement and transactions through the bottlenecks created by ports and market places.
6. *Object Manufacture.* What is the technical difficulty required for the manufacture of culturally significant items? The higher the labor input and especially the higher the skilled labor input, the more easily the production process could have been controlled. Objects with high labor demands could have been regulated by the use of mobilized staples to support the workers. Thus, the limited numbers of highly skilled craftspeople would have made them easier to dominate as attached specialists (Earle 1987). Despite their beauty and importance, some cultural significant items, such as carved gourdes, rock art, and most ceramics, could have been manufactured by many individuals with limited training and apprenticeship. Other items required more skill and technical knowledge that could be quite limited. For example, the knowledge required for complicated metalwork, glasswork, porcelain, and silk were quite high, allowing control over the productive process. Thus, the technical difficulty of manufacturing for any object indicates the likelihood that only a few gifted specialists, attached to the elite sector of society, could have made them.

To demonstrate how such descriptions could be used, the following presents information on the role of trade in the political economy of the prehistoric

Hawaiian Islands and the Andes. These civilizations provide countercases of social evolution that help illustrate the similar processes that were involved in the evolution of all civilizations. Although the Eurasian–African patterns of trade were neither universal nor necessary for the development of complex sociopolitical forms, similar processes were involved in the evolution of all civilizations.

COMPLEX SOCIETIES WITHOUT SIGNIFICANT TRADE: THE LESSON FROM THE HAWAIIAN ISLANDS

As described by Spriggs (Chapter 15, this volume), trade that connected with the world system appears to only have reached as far as western New Guinea, simply because forests and specialty products profitable in the world system were available closer at hand. The Pacific was cut off from world trade. Although in western Polynesia, where island groups were located fairly close to each other, regional trade among a number of island groups did develop and was associated with state formation in the Tonga group (Aswani and Graves 1998), such trade was minimally developed and of little apparent significance in state formation in eastern Polynesia.

In contrast to social development in Eurasia during the Bronze Age and Iron Age, the political economy in the prehistoric Hawaiian Islands rested on a foundation of staple mobilization, which was the more common foundation for early political development in most chiefdoms and archaic states. By means of sponsored construction of new facilities and through military conquest, ruling elites and their institutions asserted ownership over productive lands and mobilized surpluses in the form of corvée and staple goods (Earle and Doyle 2008). Originally labeled by Marx as the "Oriental Mode of Production," the development of extensive irrigation systems, terrace complexes, and drained fields created a highly productive agricultural base that provided staple surpluses used in the support of emerging social stratification and complex institutions (Earle 2002). This pattern was probably the original basis for social complexity in many world regions including Eurasia and Africa, where subsequent trade became a foundation for increasing political scale and central organization. The same results, however, were apparently created in the Hawaiian cases without trade. Thus, the alternative (nontrading) mechanisms must be examined.

For the emergence of state societies, alternative pathways with rather similar processes can be illuminated. The first step involves the generation of surpluses of staples used to support the local ceremonial definition of communities and distinctions of leadership within them. Such developments are fundamentally corporate, creating what Renfrew (1974) called a "group oriented chiefdom." Leadership is not emphasized symbolically, but a leadership

structure can be inferred from the coordinated group activities of feasting and monumental construction. As conceived by Blanton et al. (1996), such a corporate structure would have limited the autocratic authority of leaders, who would have stressed their primary role as serving the local polity. However, this group-serving ethos would have been rather inconvenient for a leader's power. Instead, leaders would probably have actively searched for ways to distance themselves from the demands of the group by creating exclusionary principles of separation. In this case, the role of external trading networks was critical to form the stratified system that characterized what Renfrew called "individualizing chiefdoms." Thus, the shift from the Neolithic to the Bronze Age in Europe could be explained by changing the political economy to one based more heavily on trade (Kristiansen and Earle 2015). Trade was, however, only one of several mechanisms that could provide the same distancing to create a stratified structure. Equally important were warfare and conspicuous consumption of prestigious and religious power objects.

A fully documented case of independent state formation without long-distance trade is the precontact kingdoms of the Hawaiian Islands (Hommon 2013; Kirch 2010). Because of the islands' isolation, this case may be unique, but it helps make clear how trade is not necessary for civilization. The Hawaiian Islands sit in the dead center of the Pacific, more than 3,000 km from the nearest inhabited island group. Following colonization by Polynesian seafarers and some as yet unknown subsequent interaction, the Hawaiian chiefdoms and succeeding states developed in isolation. Regional trade between the intervisible Hawaiian Islands certainly took place, but the volume of goods involved was apparently small. The chiefdoms developed without markets or significant trade (Earle 1978). No long-distance (international) trade took place with other island groups. Although a detailed founding myth told that the ruling chiefs of Hawai'i came from outside of the islands, the archaeological evidence for a foreign origin is at best circumstantial. Arguably, this foreign origin was probably only a partial truth serving to legitimize distinction and autocratic rule, rather than to tell a real history of foreign origins. The myth of foreign sovereigns for the Hawaiian Islands and other monarchies served more as part of class domination than as a record of history.

The extraordinarily complex Hawaiian chiefdoms and subsequent states were foundationally constructed on the intensification of agriculture, involving the building of agricultural facilities (irrigation systems, fishponds, and dryland fields) from which a surplus was mobilized to support ruling institutions (Earle 1980, 2012). The constructed environment created a mosaic of agricultural fields, both small and larger religious monuments, interlocking trails, and separating walls. This measured world of human construction was associated with a permanent structure of relationships between people and places, essentially a new property system that bound people as a community to places. Such

property relationships were fundamentally corporate, made by local labor, and renewed in ceremonies and everyday practice.

The connection between a community and its land, however, was apparently broken by conquest warfare. This warfare was not between communities over land but between chiefdoms for land with irrigation systems, terraces, and the labor necessary to achieve surplus production. Hawaiian conquest warfare was most extensive for the histories of Maui and Hawai'i, where archaic states emerged (Kirch 2010). By right of conquest, the community land became the paramount chief's land, which he could then either keep for himself or allocate as a fief to provide for a supporter's elite lifestyle. As lords, the chiefs of the communities (*ahupua'a*) allocated land through their local managers to farmers, who in compensation had to provide labor on land set aside for surplus production for the chiefs (*ali'i ai ahupua'a*, "chief who eats the community"). The community land, defined by constructed walls and/or topographic features such as ridges between valleys, became units of taxation. The creation of these territorial units was basic to the new states (Hommon 2013). Warrior specialists formed the cutting edge to sever the link between farmers and their community's land, which the commoners then received from the conquering chiefs in return for labor and tribute obligations.

Foundational to the institutionalization of the Hawaiian state was the emergence of a new ideology of divine kingship (Kirch 2010). Kirch argues that such divine kinship is in fact the defining characteristic of state societies and one of the clearest elements that differentiated the Hawaiian Islands from Polynesian chiefdoms. In terms simpler than Kirch would have sanctioned, the ruling chiefs of the Hawaiian Islands developed a new ideology of chiefly rule that defined them as gods on earth, effectively abrogating the social contract of reciprocity on which corporate chiefdoms rested.

As characterized the development of chiefdoms, local and regional groups were defined by the construction of ceremonial monuments. The institutionalization of the chiefdom was built as a monumental landscape that provided the sacred spaces for community and chiefly ceremonies (Kolb 1994). Late in the sequence, ceremonial cycles became increasingly important as part of the ruling ideology of divine kingship, especially the ceremonies associated with special religious monuments of the high chief and his war god (Kirch 2010). Human sacrifice at the chiefly monuments dedicated to the god of war demonstrated a new control over life and death (Kolb 1994) and, in the annual Makahiki ceremony, the ruling chief-king (*ali'i nui*) traveled around the island of rule as Lono, the god of fertility (Valeri 1985). The lesson of divine distinction was evident in both the ceremonies and temple constructions.

Chiefly accoutrements were essential to distinguish the ruling Hawaiian elite. As described earlier in relation to the structure of commodity chains and possible bottlenecks, although trade offered many opportunities for chiefly

control, a primary bottleneck in the prestige economy was the specialized manufacture of singular objects. In Hawaiian society, although prestige goods were mainly local to the Islands, their manufacture created an opportunity to convert staples into objects of sacred meaning by supporting attached specialists.

Social distinction could be seen through clothes, especially chiefly paraphernalia, which included feather cloaks, helmets, and associated objects (Earle 1990; Figure 16.1). Communities with access to particular bird species with the rare and most dramatic red and yellow feathers were required to provide them as part of their annual tribute to the paramount. Staples collected from agricultural lands then supported the feather-working attached specialists, who produced the distinguishing social regalia for the paramount's personal use and for his distribution to his hierarchy of chiefs. Regional control over the manufacture and distribution of such feather items materialized an ideology of divinity; ruling chiefs literally wore the clothes of the gods. Thus, local production of the symbols of ruling ideology provided the same function of ideological distancing that was provided elsewhere by foreign exotica.

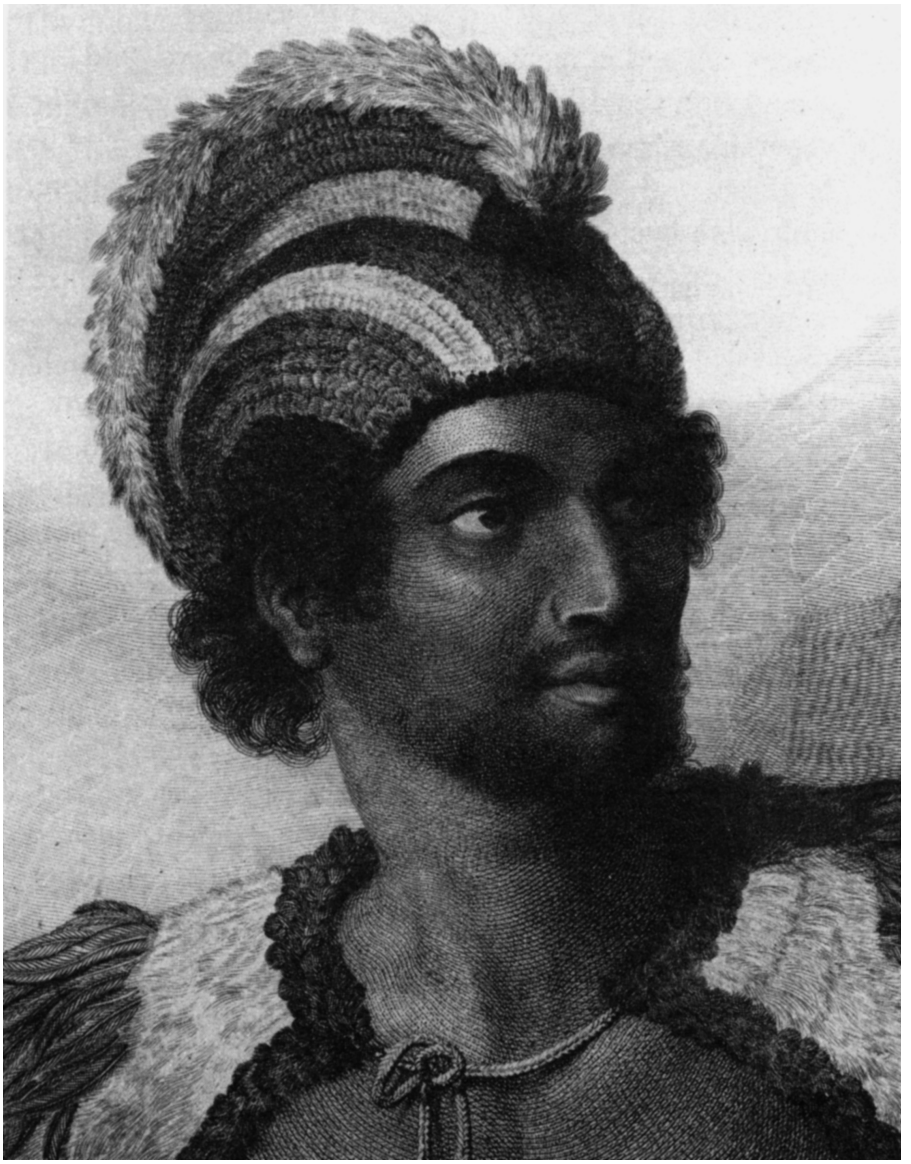
In the Hawaiian chiefdoms and subsequent states, the mobilization of local staples supported a range of power specialists, who included land managers, warriors, priests, and craftspeople, who created local institutions of separation and domination that structured the development of civilization, which was cut off from the developing world system of trade throughout Eurasia and Africa. The process of social distancing of a ruling class from their commoner base was common to the emergence of states. In all cases, special exotica served to define distinctions often in sacredness, but such incredible objects could be either obtained at a distance or manufactured locally by highly gifted attached specialists.

The Andean case clearly illustrates how this worked.

TRADE AND THE POLITICAL ECONOMY OF ANDEAN PREHISTORY

The role of the political economy in the evolution of Andean civilization appears to have followed a parallel route to the development of Hawaiian civilization. Similar processes seem to have been in operation, which emphasized the mobilization of staples from intensive irrigated agriculture, changing property rights with conquest warfare, and the assertion of a ruling ideology materialized in a dramatic set of objects. Thus, the emergence of complex societies and their elaborate cultures can take place even in continental regions without substantial long-distance trade.

In Chapter 17 (this volume), Alf Hornborg describes the usefulness of a world-systems approach in understanding the role of distant relationships in the emergence of Andean civilization. From early on in the Andean sequence, long-distance trade in symbolically charged objects, such as Spondylus shell



16.1. Hawaiian chief dressed in the feather regalia of the gods. Drawing by Webber, who accompanied Captain Cook's third voyage. BL Add Ms 15, 514.27; reproduced by permission of the British Library.

from Ecuador, although never of high volume, was critical to the ceremonial elaboration that integrated broad regions symbolically (Paulsen 1973). Metals, textiles, and ceramic industries were highly developed, while both the technology and iconographic significance of these objects evidently moved between regions to unify the theocratic legitimation of emerging complexity. The Andean empires, such as the Inca and probably the earlier Wari and

Tiwanaku, acted as "world empires" that integrated politically and, to some degree, economically wide regions of the Andes. However, in contrast to the Eurasian–African cases, which provide the focus of the present book, and in contrast to the developed mercantile systems in Mesoamerica (see Blanton et al. 1981; Earle and Smith 2012), the extent and significance of trade in Andean civilizations was comparatively small.

The fact that, as well documented for the Inca Empire, trade played a limited role in the history of Andean civilizations does not, however, dispute the fact that trade was of great importance elsewhere. Rather the differences (relative unimportance of trade) in the Andes help bring into focus exactly how and why trade was significant elsewhere. High-end prestige objects were found in both world regions (Eurasia/Africa and the Andes), and the contexts of their finds appear to have been quite similar across ritual, burial, and household contexts. Their commodity chains were, however, embedded very differently in the political economies of the various world areas. Despite these differences, however, the end results were quite similar, which suggests that trade was important first and foremost because of its potential bottlenecks in high-value commodities. The same political function provided by trade in Eurasia was provided in the Andes by the administered production and largely regional distribution of objects of social and symbolic distinction.

The prehistoric sequence for the Andes documents the independent rise of truly complex societies in South America before Spanish conquest (Moseley 2001). From 2600 BCE onward, local chiefdoms and subsequent states built large pyramidal mound groups along the dry coastal river valleys of Peru, where large-scale irrigation and drained field complexes were constructed. The monumental architecture was of adobe brick with elaborate sculptural and painted decoration. In these complex polities, assemblages contained an expanding range of social objects, among the most highly crafted and beautiful in human history. No evidence of warfare exists for this early period and leaders were not represented in distinctive burials. This early development of social complexity was apparently based on staple mobilization from a highly productive agriculture based on local (corporate) groups and their ownership of the constructed landscape of agricultural fields and ceremonial monuments.

The primary mechanism of state formation may well have been conquest warfare that effectively severed local corporate groups' control of their staple base. In the Early Intermediate period, based on the development of intensive and large irrigation systems, the first Andean states were fashioned through conquest along coastal Peru. The Moche state illustrates this process dramatically, as a specialized warrior class and an elaborate new ideology were crafted. Each coastal valley originally represented a self-contained geographic unit reaching from the sea to the highlands; the rich alluvial soils together with elaborate irrigation systems helped produce the staples that fed a dense

population. Dramatically these coastal states constructed impressive pyramids that dominated the economic and ritual landscapes of each valley. However, like the Hawaiian state formation, the Moche political economy, originally based on local corporate ownership, was transformed through conquest of one coastal valley after another. The creation of the state was through subjugation and the key outcome was to create a ruling class supported by a warrior elite that could exert an overarching ownership over agricultural lands.

During the Moche period (100–800 CE), new aspects of the political economy created institutions of state power through an elaborate material culture inventory that distanced the ruling elite as a separate class based on social and religious grounds. Typically, in the familiar pattern from Eurasia and Africa, such a distancing is based on new global ideologies that involved both international symbolic connections and the emergence of trade in high-end goods such as metals and other foreign materials. Is it possible, however, for complex political forms to develop without trade as a strongly integrating mechanism?

In 1982, when I set up a regional research project to investigate the effects on imperial conquest by the Inca in the Mantaro Valley of Peru, I proposed a similar approach. The main idea to be investigated was that, by establishing a broad peace that stretched the length of the Andes (3,000 km), Inca conquest and incorporation would have radically lowered the cost of trade (transaction costs) and immediately spurred the development of long-distance trade and the creation of regional specialization, ideas linked to the notion of a world empire. This hypothesis was based on the accepted economic principle that humans were fundamentally traders, simply waiting for opportunities to exploit regional comparative advantages reflecting differences in resource availability, technological knowledge, and economies of scale (North 1990; Warburton, Chapter 3, this volume).

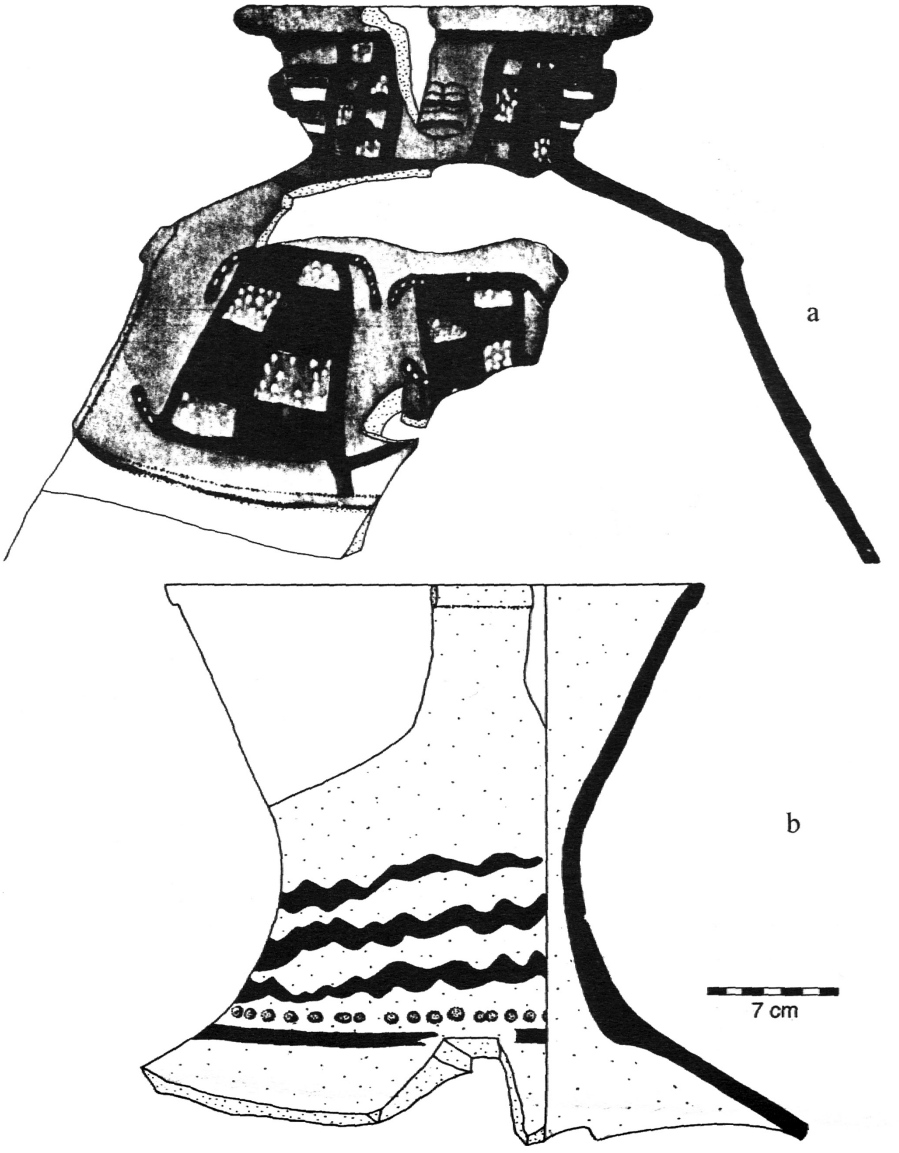
Despite the overwhelming attractiveness of this formal logic, the archaeological evidence has proved it to be wrong. In this case, evidence comes from the systematic and large-scale archaeological excavations conducted by the Upper Mantaro Archaeological Research Project (UMARP), which excavated thirty households of the local Wanka (800–1532 CE), a group of highland chiefdoms conquered and incorporated into the Inca Empire about 1460 CE (D'Altroy 1992; D'Altroy and Hastorf 2001; Earle 1985, 2001; Earle et al. 1987; Hastorf 1993). Although Andean archaeologists seldom present evidence for trade systematically, the following discussion attempts to relate the UMARP findings to the broader picture for the Andes, using the five variables outlined earlier.

1. Definition of Socially Significant Objects for a Particular Time and Place. Prior to Inca imperial conquest, the highland Andean chiefdoms had a modest number of prestige goods that were both locally produced and exchanged regionally

among local elites (Earle 2001; Owen 2001). A few items, such as Spondylus and silver, were obtained from long distances. During the excavations of highland Wanka households both before and after Inca conquest, prestige/sacred objects included most importantly decorative items and ceramic vessels. Metal ornaments included small silver and copper disks probably sewn onto clothing, pins used to secure clothing, pendants, and copper needles (Owen 2001). Metal objects were found in less than 1 percent of burials and scattered in a few general household contexts (suggesting that the items were part of clothing) and in the odd dedicatory cache. Shell (local and maritime) beads and pendants were found in very low numbers. Metal and shell items were more common in elite households, but not exclusive to them. In burials, most metal or shell objects appear to have been included symbolically as the odd piece or two, but a few burials (probably elites) had pins or pendants on dressed corpses. Households appear to have had broad access to a few special objects used in both ritual and everyday contexts apparently to distinguish personal status, but not absolutely as would be expected in a class society. With the Inca conquest of the region, the frequency, use, and distribution of prestige goods did not change. Copper objects increased somewhat in frequency, and silver remained unchanged.

High-end ceramics followed a similar pattern (Costin 2001; Costin and Earle 1989). Most Wanka ceramics were well formed, fired, and decorated without great effort or skill; technologically they were similar to many Bronze Age Eurasian ceramics. Some ceramic objects were of higher quality than others, and these appear to have been used in special contexts, such as feasting. Prior to Incan conquest, the best ceramics were andesite-tempered wares, often including large jars with clay applique faces and ears on the necks and with applique hands clasped across the pot's body (Figure 16.2). Other local Wanka wares occasionally had a similar form. Based on size, form, and ethnographic parallels, these face-necked jars were probably containers for maize beer (*chicha*) served at feasts. For the andesite wares, vessels were well finished and painted using three-color painted designs; these vessels were concentrated in elite households (about five times the weight per excavated volume than in commoner households). Following Inca conquest, elaborately decorated Inca-style vessels partly replaced the ornate Wanka andesite and local Wanka wares. The most common Inca form was an aryballoid, a liquid storage jar used for maize beer. These Inca-style vessels were again highly concentrated in elite households (about six times the weight per excavated volume). Although rarely found in burials, ceramics of special shapes and with more elaborate decoration appear to have had been used in all households, mostly likely during family feasting.

In contrast to the relatively low level of special objects in the Mantaro, the more complex chiefdoms and states on the coast and the imperial states in the



16.2. (a) Andesitetempered face-necked liquid storage vessel; (b) Wanka Base Clara liquid storage vessel (Costin 2001).

highlands were associated with dramatic and elaborate prestige and ceremonial goods. Objects included intricately decorated and skillfully manufactured items of personal ornamentation, ceramics of beautiful form and decoration, textiles with intricate weaving, and remarkable feather work. Metal objects were routinely used, although less frequently than elaborate ceramics. Textiles and feather working were also in evidence, although they can only be recovered under conditions with good preservation for organic materials. As a general trend, the numbers, variety, and technical sophistication of special objects in

the Andes increased with the extent of social stratification. As will be discussed, the elaboration of a prestige/sacred inventory was related to the development of "international" religious systems and to a class-based society.

2. *Volume.* The low volume of trade and lack of markets in the Andes are well known from the ethnohistorical record (Murra 1980), but they are often misrepresented for the archaeological record because of unsystematic presentation of the evidence. Wanka household excavations illustrate how most objects were obtained locally: Many prestige/sacred goods were obtained from the Wanka region and long-distance (interethnic) trade was almost nonexistent (Costin 2001; Earle 1985, 2001). The percentages of assemblages (subsistence and social objects) can ideally be compared to the distance from origin: local (< 15 km) from immediately around a settlement or its neighbors within a local polity, regional (15–50 km) from neighboring polities of the same ethnic group, and long-distance (> 50 km) from ethnically distinct social groups. Food and everyday tools made out of ceramics and stone were mostly (more than 80 percent) local, in sharp contrast with the commercialized Aztec economy (Earle and Smith 2011).

Special Wanka objects (items of personal dress and special ceramics) were obtained primarily regionally within 50 km within the broader extent of the Wanka ethnic group. Because prestige/sacred goods were not common, their exchange would thus have been low in volume and would not have engaged special traders (Earle 2001). From the thirty excavated Wanka households, all metal objects recovered could fit into a small bag easily carried by one person. The primary high-end commodities traded long distance included small amounts of tin, silver, and seashells. No tin was found in the Mantaro region prior to Inca conquest, but afterward it was alloyed with copper to produce bronze for virtually all copper-based objects. The volume of tin was limited, but its inclusion would have been essential for a new Imperial bronze look. Other items of personal dress included semiprecious stones (especially copper-related chrysocolla), which would have been regionally available, and shell, which would have been traded into the highlands about 100 km from the coast. The amounts of shell and semiprecious stone were very small and scattered in the Wanka assemblages. In essence, the low volume and (by and large) fairly short distance of trade in items of personal dress suggest that exchange would have offered no effective bottlenecks and so had little significance in the political economy.

Considerably more important were the feasting paraphernalia that included highly decorative, distinctive forms (maize-beer containers, bowls, and plates), which represented 25 percent of the overall ceramic assemblage. Much of this material was traded regionally, although local copies also existed. Based on petrographic studies and neuron activation analysis, both the andesite-ware vessels used for feasting prior to Inca imperial conquest and the Inca feasting vessels,

which largely replaced the Wanka ceremonial forms, were manufactured regionally (Costin 2001; D'Altroy and Bishop 1990). Ceramics obtained from long distances were only found in trace amounts: four sherds (out of hundreds of thousands), three from the north coast, and one Inca plate from Cuzco. Thus, the fairly common feasting ceramics were almost exclusively of regional origin and did not involve the development of specialized traders (Earle 2001).

Contrary to the theoretical argument of UMARP's original research design, the amount of trade documented in Wanka settlement excavations was almost unchanged from the pre-Inca to Inca era. Despite the establishment of an imperial peace (and thus the radical lowering of transaction costs), no increase in trade can be documented; this stability supports the existence of politically administered low-volume trade by the Inca, rather than open markets or independent traders, both of which should have increased volumes as trading costs were lowered. From the pre-Inca to Inca period, two significant changes were the addition of tin (alloyed with the regional copper) obtained from long distances and the replacement of regional feasting wares with Inca wares, both of which were apparently part of a targeted strategy to control the local political economy (Costin and Earle 1989).

In the extensive literature on Andean civilizations, trade is frequently mentioned as significant, but this trade is largely assumed (rather than demonstrated) to have been important. Most items identified as belonging to the long-distance trade in the Andes were very rare items found primarily in burial contexts. Although displaying stylistic regional connections, the actual objects (especially metal and ceramics, but also textiles) were usually manufactured in their regions of use. Possibly a major exception, high-end textiles required trade in materials: cotton from the coast and wool from the highlands. For the Moche, some high-end ceramics found in burials were traded over long distances, but these items amounted to a very small number of the total ceramics (see Castillo and Jaime 2010). Distant relationships certainly were established in these most complex Andean polities, but high-end ceramics and textiles appear to have been produced and distributed within administered regional economies.

As discussed by Hornborg (Chapter 17, this volume), some examples of higher-volume, long-distance trade have been documented for Andean prehistory. Four well-documented examples should be mentioned. The first example is the Spondylus shell obtained from coastal Ecuador. Although it was normally transported in very low quantities, concentrations of Spondylus were found in ritual and burial contexts at Pampa Grande and other Moche and Wari-related sites (Shimada 1994); these examples appear to represent a more substantial trade.

The second example is obsidian. In most periods, obsidian was moved locally and regionally (< 50 km), not unlike chert blades in the Mantaro. However, during the Middle Horizon, a high density of obsidian flakes (literally tons of

this material) was recorded on the surface of the capital city of Wari (Stone 1983), and most Wari-related sites had significant amounts of obsidian in their lithic assemblages. The actual use of obsidian in the Wari political economy is not well understood, but the production of special weapons may have been significant (Coleman-Goldstein 2010). For the few Wari period settlements in the Mantaro Valley, obsidian has been observed on the site surfaces; however, it only represents a trace of the later Wanka lithic assemblage. Hydration studies of the Mantaro obsidian from post-Wari contexts show rinds of two thicknesses; the conclusion is that all obsidian probably entered the Mantaro during Wari times and was simply scavenged later. The third example is tin, the sources of which were restricted to northern Chile. Although absent from most copper alloys in earlier periods, during the Late Horizon, tin was added to virtually all copper objects, creating what Lechtman (1976) called a "tin horizon." The fourth is high-end textiles. Although examples of these materials have been broadly reported, little has been done to quantify the actual volume of trade in these special materials that could have been of importance.

Based on present evidence, the long-distance movement of materials across the Andes was both episodic and highly specific in terms of materials and uses. In almost all cases, trade volume was low. Future work should be undertaken to investigate the specific contexts of these examples and other possible instances of long-distance trade to show how they may have functioned in the Andean political economy across its long sequence of social evolution.

3. *Transport Routes.* Trade routes in the Andes probably followed a complicated network of trails through the mountains and along the coast. Trail systems and open coastal routes provided many alternatives for movement that made controlled distribution difficult in the political economy. Trade routes could be created in any of the many coastal valleys that branched off the high plateau, continuing across open grassland, through the intermontane valleys and, finally, down the many eastern valleys leading toward the tropical forest. The rivers of the Andes were not navigable. In essence, the topography created many alternative routes of travel, each with similar costs. However, the construction of roads and bridges by the larger Andean chiefdoms, states, and empires created potential points of control at river crossings and narrow gorges. These roads seem to have been built for military and ideological (not trading) purposes (Hyslop 1984), but their potential use for trade needs further investigation. In the Mantaro, at least, the construction of Inca roads and bridges, perhaps surprisingly, did not increase the volume of long-distance trade from the pre-Inca to Inca periods.
4. *Transport Technology.* Transport technology in the pre-Hispanic Andes was distinctly different from that in Eurasia during and after the Bronze Age. Movement of commodities was largely on foot using the extensive network of trails. Much has been said about the importance of llama caravans used in trade in the Andes;

however, based on archaeological evidence, such caravans were apparently of limited use. The primary exception was the historically documented use of llama caravans to transport food for Inca military adventures. Systematic work on llama caravans is desperately needed, but presently no evidence supports the idea that increasing traffic of bulk goods was associated with caravan routes during the Inca period. In the Mantaro, where llamas had long been used as beasts of burden, the goods traded regionally and over long distances by the Wanka were light and of low volume, with the exception of the feasting vessels, and most were probably traded hand to hand by Wanka elites or by administered distribution (Earle 2001). Ethnohistorical sources describe the use of llama caravans to supply Inca imperial armies, but strikingly there is no evidence for increased llama breeding for caravans following Inca conquest of the Mantaro Valley, a good llama-breeding region (Sandefur 2001). The low level of trade appears to have meant that llama caravans were of limited significance as a means of integrating the Andes more than on a regional level before and after Inca imperial conquest.

Boats were probably of even less importance in transport than the caravans, because the rivers in the Andes were not navigable. Balsa rafts with sails were described historically as a means of transport along the Pacific coast from Ecuador to Peru, but the volume and extent of that trade was apparently modest. The importance of specialized means of transport, especially across distances greater than 50 km, appears to have been limited. Most movement was probably on foot or as part of annual movement by pastoralists, for which trade was only of a secondary purpose.

5. *Transport Personnel.* Transport personnel (specialized traders) were of restricted importance in the Andes. In the highlands, pastoral groups probably used their llamas to transport obsidian and other goods (Browman 2008), but the actual evidence for long-distance trading is largely speculative. Ethnohistorical sources describe the annual movement of highland pastoral groups down to the coast for seasonal pasturage, and these groups probably brought goods with them as gifts to their partners, who in turn offered them access to their harvested fields. Some coastal groups were certainly specialist fishermen, trading their catch reciprocally with neighboring agriculturalists. Surprisingly, however, archaeological evidence has not shown that these maritime groups were also traders. For example, at the well-excavated Late Intermediate period coastal settlement of Cerro Azul, excavators found large-scale processing and storage facilities for fish, but no evidence for distant trading (Marcus 1987). The small reed boats used in fishing were unsuitable for long-distance trading.

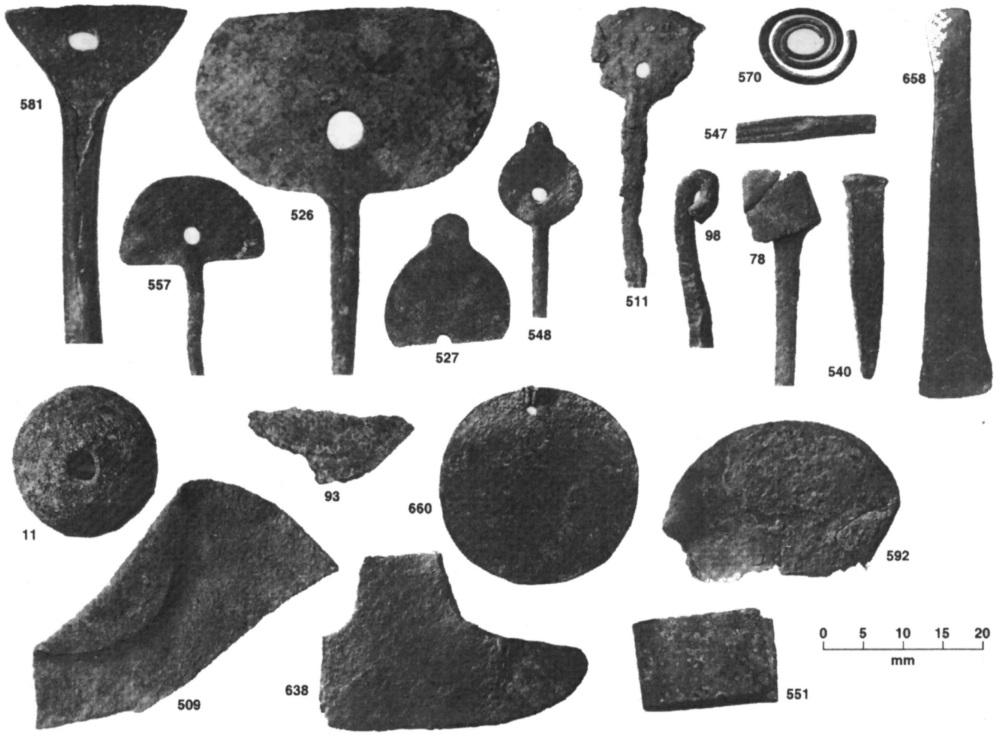
Ethnohistorical documents describe the people of Chincha as specialist traders, transporting Spondylus from Ecuador (Rostworowski 1975), but the

rather narrowly focused and low volume of these trading activities suggest that trade had little broad significance in the political economy. In Ecuador, however, specialized traders did move goods between the highlands and tropical forests and, following Imperial conquest, the Inca relied on these traders to obtain specialty forest products (Salomon 1986). In addition, the episodic trade in Spondylus appears to be linked to these traders. Within the core of the Inca Empire, interpersonal exchange probably moved most goods. With Inca, however, specialized personnel undoubtedly moved between regions (Oka, Chapter 11, this volume).

6. *Object Manufacture.* With their attached specialists, complex manufacturing sequences were the primary means by which ruling Andean institutions controlled the production and distribution of socially significant items. Among the Wanka, the social items recovered from pre-Inca contexts were on the lower end of the scale of technological elaboration, and, thus, their significance in the political economy was relatively minor. The local styles of metal and ceramic special objects were simple, easily produced by many specialists and so difficult to control (Owen 2001; Figure 16.3). Most metal objects, such as the silver and copper disks, were cut from hammered sheets, and pins and needles were made from drawn and hammered wire. A few of the more elaborate forms (tupu pins and tumi pendants) were probably made in open clay molds. Some metal pieces were decorated with simple incised-line, geometric motifs. Wanka ceramic forms were manufactured with uncomplicated techniques: coiling (using a turning stone), surface decoration with simple slips, free-hand painting, applique, stone polishing, and open-air firing. The larger pots would have been a challenge to dry and fire correctly, and would therefore have been produced by more skilled artisans.

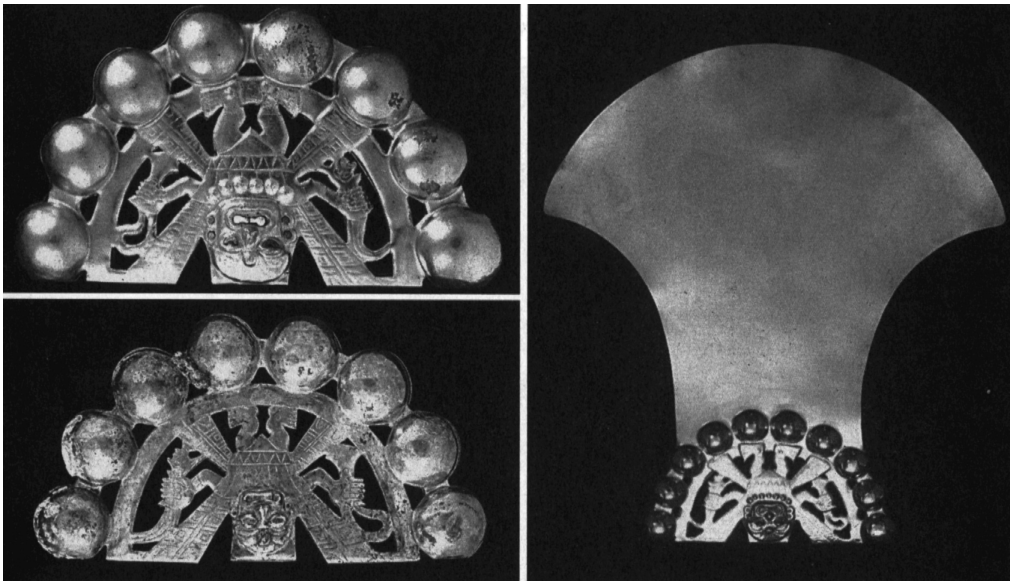
Despite the fairly low skill required for the manufacture of Wanka social items, elite households did sponsor the production and exchange of these goods. Prior to Inca conquest, metal manufacturing debris in small amounts was concentrated in, but certainly not exclusive to, elite households (Owen 2001). Exclusive control would have been difficult because many craftspeople could have engaged in such simple manufacture. By maintaining some control over the regional exchange in copper needles, elites might have been able to dominate the manufacture of better-quality clothing. Perhaps more important was the concentration of textile production in elite households (Costin 1993). More importantly, however, craft manufacture of prestige objects might simply have been a measure of surplus available to elite households. Staples collected by Wanka chiefs probably supported larger families, whose members crafted socially significant objects. Like feasting, prestige goods simply measured a chief's ability to accumulate staple surplus.

Following imperial conquest, the assemblage of Wanka prestige objects changed little, suggesting that distinction based on the use of prestige goods



16.3. Wanka copper and bronze metal work, primarily for personal adornment (Owen 2001: 271).

did not increase. However, it is important to note that Inca institutions appear to have selectively dominated the production process of these objects. The Wanka craftspeople continued to produce and trade regionally in both metal and cloth objects, but the process of manufacture became dependent on the Inca administered long-distance trade in tin required for the ubiquitous manufacture of bronze decorative objects and needles (Owen 2001). In addition, a few bronze objects (two pins) were made by the lost-wax process, a technique newly introduced into the Mantaro region and perhaps conducted by Inca metalworkers. According to one historical account (Cieza de León 1959: 114), gold and silversmiths, whom the Inca may well have recruited from Mantaro communities, worked at the administrative center of Hatun Xauxa. Probably, the empire encouraged the concentration of metallurgist, weavers, and potters in and around the administrative center. Production would then have been distributed regionally as a means to bind the local population to the state, but, as discussed by Hornborg (Chapter 17, this volume), state agents transported at least some of the most important products, such at the kumpi cloth, gold, and silver, to the capital at Cuzco, where it could be held or redistributed as part of the state-dominated political economy (D'Altroy and Earle 1985).



16.4. Highly crafted gold ritual paraphernalia from a Moche royal burial at Sipán.

AN ANDEAN MODEL FOR CIVILIZATION WITHOUT MAJOR LONG-DISTANCE TRADE

The evolution of state polities and their associated civilizations required cultural mechanisms to institute new relationships of power and distinction. For state formation, it is probable that a highly elaborated symbolic system of exotica would be desirable to distinguish an elite class and to legitimize its dominance. Rulers would likely have wanted to create iconographic systems of distinction and legitimation, materialized within an enriched material culture, which the rulers could control. This is the "high culture" that characterized civilizations. Using special materials like bronze and silk, specialists crafted objects of distinction and significance that only some could possess. A world system was often essential to this process, because foreign raw materials, like amber, and special objects, like golden idols, could be envisioned as magical. Elites could construct a culture of distinction based on foreign reference that held esoteric powers unavailable to local peoples (Helms 1979).

As seen by the Hawaiian and Andean cases, however, long-distance trade was not essential to create the conditions for controlling exotica of distinction and legitimation. Local control over the political economy seen in corporate systems based on staple mobilization can be extended both through conquest to reconfigure traditions of resource ownership and through the local manufacture of the extraordinary through institutional sponsorship of elaborated crafts. In simple terms, although a commodity chain for symbolically charged

objects may be quite short (only local or regional), the technological complexity and labor required to produce the objects formed its own bottlenecks for control.

The Andean case illustrates how the high culture of civilization could be created regionally, with little long-distance trade. The Moche state made exquisitely elaborated craft industries, including examples of metalwork, textiles, and ceramics. These were the products of highly gifted specialists having special skills and knowledge. These few highly gifted individuals probably served the Moche lords, producing special finery, which, like the Hawaiian cloaks, clothed the kings in remarkable godlike attire. The famous Moche Lord of Sipán, whose burial was in an adobe brick pyramid on the north coast of Peru (Alva and Donnan 1983; Figure 16.4), was dressed with a vast array of ornaments (nose rings, ear plugs, helmets, a pectoral, and an incredible necklace of large peanut-shaped beads) of gold, silver, copper, and semiprecious stones. He was adorned as the central figure of a myth represented on murals and ceramic vessels. Surrounding the Lord were sacrificial burials creating a tabloid of power. Other Moche burials depicted different mythical figures. Such burials represented an extraordinary concentration of wealth and symbolism.

Later in the Moche sequence, craft specialization began to take on a rather different role, decreasing in quality but increasing in scale. Large workshops have been excavated (Russell, Leonard, and Briceño 1998), and a whole crafting district existed in the Moche Valley between the Pyramids of the Sun and Moon. What was going on here? It is probable that the nascent Moche state was developing industrial-scale production of significant objects that could be distributed by the state to support a state religion and legitimize domination.

The high culture of the subsequent Wari (600–1200 CE) and Inca (1440–1533 CE) empires document how Andean states were dependent on intensive agricultural production and on the controlled production and distribution of special objects (D'Altroy and Earle 1985; Earle and Jennings 2014). The Wari empires expanded through conquest to create a large political system with cities, administrative centers, road systems, and impressive irrigation and terracing complexes (Schreiber 1992). Associated with the formation of the Wari empires were impressive assemblages of special artifacts, including elaborate metal items, textiles, and ceramics. An example is the impressive high-quality, elaborate pottery associated with imperial settlements through the empire and in elite burials outside the empire.

Conchopata is a Middle Horizon town, located outside of the capitol city of Wari, and extensive excavations verify substantial production of the state ceramics (Tschauner and Isbell 2010). Production tools (ceramic molds, polishing stones, and ceramic scrapers) reflect specialized pottery manufacture here, but what is striking is that the distribution of these tools correlates with general household refuse, suggesting that most households produced ceramics

at the settlement. Conchopata was a specialized community of potters probably assembled by the state to manufacture high-end pieces carrying a state-sponsored religious iconography. The strong stylistic affinities between the state style and earlier Nazca-style pottery may indicate that at least some of these ceramicists were from coastal communities, where the elaborate "parent" style had been created.

The broad "international" imperial Wari style of ceramics and other paraphernalia represented the establishment of a new doctrinal religious ideology, which linked imperial strategies to an explicit religious system promulgated in state-sponsored ceremonies (Tschauner and Isbell 2010; see Whitehouse 2004). The Wari Empire may have fashioned a doctrinal style to promulgate a religious ideology through the regions of control and beyond to contemporary societies like the Moche and Lima kingdoms. Based on present evidence, state-sponsored production of ceramics, textiles, and perhaps obsidian may have been quite high in volume and centralized. Products would then have been distributed directly by perhaps state-administered state agents, traders, and others (Earle and Jennings 2014). This pattern would seem to fit a model of a world empire, based on a conquest of regions for resource exploitation and the development of an integrated economy. To some degree, the experiments of the Wari Empire appear to have served as a model for the later Inca Empire.

By the time of Spanish conquest, the Inca Empire was the largest land-based empire in the world, and it was characterized by impressive artistic, military, and agricultural achievements, but despite this evident sociopolitical complexity, trade was remarkably limited and markets nonexistent. Like the Wari Empire, the political economy was based on intensive agriculture and a corvée labor system that mobilized staples used to support imperial strategies ranging from ceremonial occasions to major building projects and specialized production of objects that both distinguished a ruling elite and their institutions and supported a doctrinal state religion.

In the Mantaro, where little changed in the regional economy, the Inca-style feasting assemblage largely replaced the previous Wanka. New Inca vessels, although remarkably similar throughout the empire, were fashioned from local clays. The labor invested in the forming and finishing of these distinctive ceramics was substantially greater than for Wanka wares, suggesting that ceramicists worked under imperial supervision (Hagstrum 1986). In terms of metal objects for personal decoration, although the basic forms and materials appear little changed, a new look was created across the Inca Empire because all Inca-period copper objects were alloyed with tin (Lechtman 1976). The movement of the tin along the empire's road system from Chile could have created the bottleneck for control. Inca imperial institutions thus apparently co-opted key steps in the production sequence (obtaining required tin and producing ceremonial vessels) that allowed the state to control social distinctions (Costin and Earle 1989).

From at least the Early Intermediate period onward, the prestige/sacred objects were generally much less technologically elaborate in the Andean highlands when compared to the coast. Using the Wanka as an example, the highland chiefdoms apparently did not possess a distinctive ruling class; chiefs remained closely associated with their local communities. During the expansion of the highland Wari and Inca empires, however, profound and qualitative differences in a ruling segment and a new state ideology were materialized with elaborated objects controlled through the production process. Because of the historical dichotomy between coast and highlands in terms of craft expertise, it appears that the highland states moved specialists into the highlands to produce the new inventory. For example, the Inca Empire relocated Chimu craftsmen from Peru's north coast to the highland capitol (Cuzco), where they produced special ceramics and other objects of significance (D'Altroy 2002). In Oka's terms (Chapter 11, this volume), the state was involved in a trade in specialized services, moving people rather than commodities as part of their political economy.

To summarize, in comparison to the Eurasian examples, Andean civilization did not depend significantly on long-distance commodity trade. Some trade certainly existed, but the objects appear to have moved largely regionally through institutional systems set up by the more complex chiefdoms, states, and empires. Similar to the civilization of Bronze Age Eurasia, special objects transformed the social logic of political systems. Andean civilization relied on elaborate craft industries in metal, textiles, and ceramics, which were in many instances more sophisticated than those found in Eurasia during the Bronze Age. The commodity chains of the socially significant objects in the Andes were, however, comparatively short, and the Andean states and empires controlled these objects and their meaning largely through sponsorship of elaborated manufacturing.

Andean coastal chiefdoms and states and highland empires constructed an ideology that separated the ruling class from the bulk of its population and established a religious doctrine that positioned the ruling class within a specific cosmic order to legitimize autocratic rule. The materialization of this class ideology required a highly distinctive set of objects. First was the special dress of rulers that identified them as living gods. Second were the vessels and other accoutrements that served as props in state-sponsored religious ceremonies. The exclusionary strategies of a ruling segment used novel ideologies (often suggesting a foreign origin) to institutionalize class divisions, but that divine distance need not be based on trade in special objects. An alternative pathway in political economies was based on staple mobilization to support craftspeople producing the special accoutrements and religious paraphernalia of ruling institutions. This alternative line toward distinction is reflected in the extraordinary elaboration of crafts and architecture in Andean civilization.

CONCLUDING REMARKS

In conclusion, a proposition concerning the alternative pathways to power is described. The evolution of chiefdoms and archaic states relies on three sources of power: economy, warrior might, and religious ideology (Earle 1997). The institutionalization of the power process involved "a deliberate change in social logic" (Flannery and Marcus 2012: 421) that legitimized class domination. The distancing inherent in this new social logic was frequently based on the myth or reality of a foreign origin for chiefs and kings, distinguishing them as separate from the common people of the land. International connections of trade and travel characterized the social changes throughout Eurasia in the Bronze Age and Iron Age. On the isolated Hawaiian Islands, however, all objects of political and religious significance were locally manufactured. In the Andes, where trade was of low volume and restricted to a few items, administrated craft production and the distribution of ideologically charged objects follows the same social logic as on the Hawaiian Islands. The production of special goods with doctrinal significance was the method used to construct a ruling class ideology in the Hawaiian and Andean civilizations. Trade and action at a distance were simply not necessary to create new class systems. Distancing through trade or other mechanisms should be understood as alternative mechanisms of class formation, fundamentally involving local power relationships. Although local distinction may often be conceived through foreign ties, all politics are local.

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SEVENTEEN

LONG-DISTANCE EXCHANGE AND RITUAL TECHNOLOGIES OF POWER IN THE PRE-HISPANIC ANDES

Alf Hornborg*

INTRODUCTION

This chapter argues that a general world-system perspective can illuminate the role of prestigious trade goods, such as cloth, shells, and metals, in the material metabolism of pre-Hispanic Andean societies and the significance of their procurement for the course of Andean prehistory. Much of the fundamental work on Andean archaeology and ethnohistory was published as early as the 1970s and 1980s, and the theoretical perspectives of mainstream Andean studies in those decades have continued to dominate the field. Given the traditional predominance in Andean studies of perspectives rooted in the functionalist discourse on "vertical archipelagos" (Murra 1972) and "ecological complementarity" (Masuda, Shimada, and Morris 1985), a fundamental question is obviously to what extent models from political economy and world-system analysis are at all applicable to this region.[1] Recent reassessments of the occurrence of markets and trade in the pre-Hispanic Andes (Hirth and Pillsbury 2013b) tend to emphasize political economy rather than cultural ecology, but without considering the applicability of world-system models. In this chapter, the potential

* There is some overlap between this chapter and an article I published in the December 2014 issue of *American Anthropologist* (vol. 116, no. 4). I would like to thank Tim Earle for extensive comments on an earlier draft. Although some differences remain between our understandings of Andean prehistory, I appreciate our fundamental agreement on the significance of preciosities in the political economy of the ancient Andes.

of such models to account for the macroscale dynamics of phenomena such as trade, imperialism, and cultural homogenization will be addressed.

IS WORLD-SYSTEMS ANALYSIS APPLICABLE TO THE PRE-HISPANIC ANDES?

At a time when archaeologists were identifying long-distance trade as a pivotal catalyst of sociocultural developments in various ancient civilizations throughout the world, including Mesoamerica, a consensus among most Andeanists emerged that such perspectives were not applicable to the ancient Andes. This consensus can to a large extent be traced to the pioneering historical research of John Murra (1956, 1972) on the economic organization of Inca society.

Murra's systematic reading of the historical sources revealed a pattern of exchange that was common among populations of the southern Andes at least since the Middle Horizon (AD 600–1000) and later elaborated into a set of political institutions that were integrated into the Inca Empire (AD 1438–1532). He suggested that Andean societies, on various levels of scale, were organized so as to control several geographically dispersed ecological zones across the diverse landscape, to have direct access to products from different environments. According to this so-called vertical archipelago model, the flows of products up and down the Andean slopes were generally managed not by traders or markets but by real or imaginary kinsmen residing in "colonies" at some distance from their core settlements in the highlands.

This understanding of the ideological rationale underlying the organization of the Inca Empire has in subtle ways framed the discourse on prehistoric trans-Andean exchange as a more general phenomenon. In terms of anthropological theory, it has tended to cater to the functionalist tenets of cultural ecology and its focus on environmental adaptation rather than to political economy and world-systems analysis. In terms of the comparative study of ancient civilizations, it has also established an unnecessarily sharp contrast between the precolonial economies of Mesoamerica and the Andes. Instead, the economies of highland Mesoamerica, the Maya lowlands, and the Andes suggest a spectrum of organizational forms, in which the Aztecs represent the commercial extreme, while the Inca asserted the most rigid political control over the flows of goods (Hirth and Pillsbury 2013a; Isaac 2013).

The historical sources clearly show that the traditional movement of goods in the region was not generally propelled by what Polanyi had distinguished as "market" principles (cf. Dalton 1975).[2] Large-scale political projects such as the Inca Empire employed kinship-based ideologies of gift giving, feasting, and other forms of reciprocity to recruit a large number of Andean chiefdoms into their expansive redistributive economy. Although the threat of military

coercion was crucial to its coherence, the Inca Empire managed to convince most of its constituent ethnic groups that the *pax incaica* offered opportunities for beneficial coexistence within the prestigious, affluent, and relatively secure realm of *Tawantinsuyu*. Even if the terms of coexistence were strictly dictated by Cuzco, the Inca Empire's strategies of diplomacy and generosity seem to have persuaded significant numbers of its provincial subjects that, on the whole, their *mit'a* (corvée) labor tax and other obligations were balanced by the prospects of peace, security, and royal generosity. Murra (1956) showed how the permutation of village-level reciprocity into imperial redistribution was founded not on tribute in kind, but on the appropriation of labor time. Transforming familiar local traditions such as *minga* labor parties and other forms of reciprocal exchange into state-level institutions, Cuzco based its imperial metabolism on the expansion of agricultural land and the intensified production of cloth, *chicha* (maize beer), ornaments, ceramics, stonework, weapons, and other kinds of manufacture. Whether constructing terraces, harvesting maize, building warehouses, conquering new provinces, shearing camelids, weaving textiles, or brewing *chicha,* it was the labor energy of its several million subjects that was the key resource of the empire.[3] The strategies through which these millions could be persuaded to contribute their labor to supralocal projects included ceremonial redistribution of valuables such as cloth, ornaments, and *chicha*. The rapidity and relative ease with which most ethnic groups and chiefdoms could be assimilated into this imperial organization suggest that they had previous experience of similar arrangements, and archaeological evidence of the exchange of cloth, *chicha*, and *Spondylus* shell ornaments in several earlier Andean civilizations indeed indicate that there had been plenty of precedents. Evoking kinship and reciprocal obligations was a technology of statecraft that *Tawantinsuyu* had inherited from earlier stratified polities such as Wari and Chimú. This was no doubt part of the reason for the rapidity of its expansion.

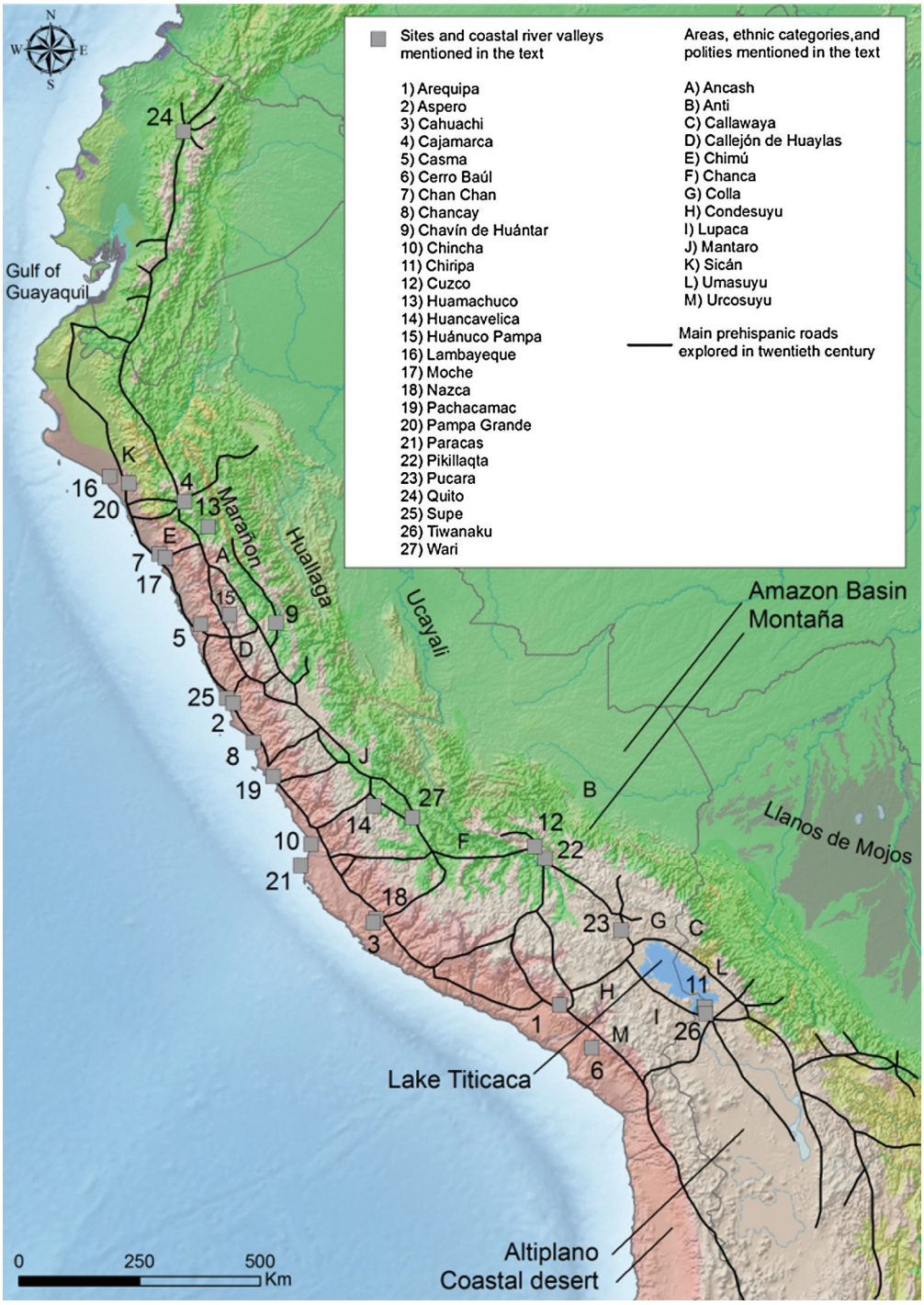
To the extent that the power of political leaders in the pre-Hispanic Andes in part hinged on their capacity to distribute valuables such as cloth and ornaments, the political economy of these societies should appear quite familiar to students of other premodern societies in many parts of the world (cf. Earle 1997, 2002; Feinman and Nicholas 2004; Hirth and Pillsbury 2013a: 17). Both in Mesoamerica and in various regions of the Old World, the control of access to rare and valuable goods has long been recognized as a basis for social stratification. Not least in Mesoamerican studies, long-distance exchange has figured prominently in explanations of the emergence and collapse of local hierarchies and the spatial expansion and decline of complex societies over time. In deference to the hegemony of the "vertical archipelago" model, however, archaeologists and historians working in the Andes have been more hesitant to use long-distance exchange and world-systems analysis to account for

early stratification.[4] It is rather rare to find them addressing topics such as the localization of ancient sites on strategic trade routes, urbanism as a reflection of specialized export production, and other subsystem responses to the articulation (or disarticulation) of wider spheres of interaction.

This hesitation is a paradox, considering that few regions in the world would seem more naturally conducive to trade than the Andes (Figure 17.1). It is reasonable to expect that the extreme diversity of ecological zones across the Andean profile, from coastal desert to Amazonian rain forest, would have generated demand for trans-Andean products and facilitated strategic control of supplies by "middlemen" or "gateway communities" in the highlands. Moreover, this state of affairs is certainly what the archaeological evidence often suggests (e.g., Browman 1978; Burger 2008, 2013; Contreras 2011; Lathrap 1971, 1973; MacNeish, Patterson, and Browman 1975; Parsons and Hastings 1988: 214–218; Raymond 1988; Rodriguez Kembel and Rick 2004; Shady and Ruiz 1979; Shimada 1985, 1987; Stanish and Coben 2013; Stanish et al. 2010; Thompson 1984; Topic 2013; Torres 1987; Wassén 1972). Indeed, there are even abundant historical indications of a long-standing exchange of products between the highlands and the lowlands, particularly along the eastern slopes of the Andes (Camino 1977; Dudley 2011; Lyon 1981; Oberem 1974; Renard-Casevitz, Saignes and Taylor-Descola 1986; Rostworowski de Diez Canseco 1977a; Salomon 1986; Santos-Granero 1992).

Archaeological discoveries in the lowlands east of the Andes also frequently suggest ancient trade connections to the highlands (Salazar 2008; Saunaluoma 2012). Furthermore, there may be linguistic evidence of extensive long-distance exchange in the Andes prior to the Inca expansion (Torero 1984, 2002). All in all, the main reason to assume that the political economy of long-distance exchange was less important in Andean prehistory than in the prehistory of comparable areas, such as Mesoamerica, appears to be deference to conventional discourse among established specialists.

The conspicuous neglect of world-systems analysis in the interpretation of Andean prehistory appears largely to derive from the unusual abundance of historical documents that pertain specifically to the institutions and idiosyncrasies of the Inca Empire, but that continue to project a pervasive image of the essence of Andean exchange as geared to ecological adaptation and community self-sufficiency rather than political economy. These documents have made it possible to reconstruct *Tawantinsuyu* from the "inside," so to speak, but may have detracted from comparative outlooks on Andean culture history. Ideographic Inca historiography has, by and large, eclipsed structural accounts. In understanding the exchange of goods and services as embedded in personal relations of reciprocity, Andeanists have tended to reject abstract models of asymmetric flows of embodied labor, trade routes, accumulation, and the center-periphery dynamics characteristic of world-systems perspectives.[5]



17.1. Some features of the pre-Hispanic Andean world system. Data on pre-Hispanic roads derive from Hyslop (1984). Reconstructions of the distribution of major languages in the early Late Horizon (ca. CE 1450) are based on Heggarty and Beresford-Jones (2012: 6–7) and Torero (2002: 465).

To assess the underlying assumption that long-distance exchange in the pre-Hispanic Andes was fundamentally different from exchange in other premodern civilizations, two questions should be posed: (1) Is exchange organized in terms of vertical archipelagos incompatible with the general category of "trade" in the context of world-system dynamics? (2) If so, is such exchange universal everywhere and at all times throughout Andean prehistory, or can more mercantile forms of long-distance exchange be detected in certain areas and specific periods?

In response to the first question, it can be argued that vertical archipelagos are the specific form that long-distance exchange assumed in the southern Andes prior to the Inca expansion. Having access to the personal motives and relations of the actors, as here uniquely provided by historical documents, is not reason to dismiss formal models that are able to account for the macroscale dynamics of prehistoric Andean societies. No doubt other varieties of personal embeddedness characterized most forms of exchange in premodern societies, but world-systems analyses of such societies are primarily concerned with the abstract asymmetries and trajectories of material flows, modes of accumulation, and shifts in dominance that can regularly be identified in the archaeological record. The "inside" view of *Tawantinsuyu* that historical documents have provided does not contradict a world-systems analysis of the formal dynamics of its emergence, expansion, and collapse.[6]

In response to the second question, it should be noted that vertical archipelagos were not the universal mode of organizing long-distance exchange throughout the Andean area and at all times. The best evidence for the occurrence of vertical archipelagos prior to the Inca expansion derives from societies in the Titicaca Basin, which appear to have established "colonies" on the warmer slopes to the East and the West of their highland cores (Goldstein 2013). The Inca imperial administration adopted the idea, most conspicuously in the form of a number of *mitmaq* colonies that were transplanted various distances within the empire. The fact that ethnic groups in the highlands have continued to maintain such "islands" or "outliers" in lowland areas after the collapse of the Inca Empire may be a legacy from *Tawantinsuyu* rather than a pre-Inca tradition. Regardless of their antiquity, rather than approach such arrangements as a mode of ecological adaptation, they should be understood as features of political economy (Van Buren 1996). Access to exotic goods was hardly equally distributed among all the members of a highland community, but an ambition subject to political rivalry (Salomon 1986). This is evident, for instance, in the concentration of wealth in the hands of Lupaca *kurakas* interviewed in 1567 (Julien 1985: 196).

A significant indication that vertical archipelagos were deliberately imposed on Andean societies upon incorporation in the Inca Empire is Salomon's (1985) examination of sixteenth-century documentary evidence of four regions in

northern Ecuador. His studies show that the local lords in the least incorporated areas on the northern frontier of *Tawantinsuyu* remained the most dependent on external, autonomous traders of exotic valuables, whereas in incorporated areas they relied on politically controlled access through an "archipelago" organization. Salomon's (1986) archival research on the archaic highlands of Ecuador reveals that specialized, long-distance merchants (*mindalá*), by providing their highland allies with exotic goods for strategic, local redistribution, were of key political importance prior to Inca dominance. These goods included *Spondylus* shell beads (*mullu*), gold nuggets, copper hatchets, coca, salt, red pepper, and cotton cloth. Salomon specifically mentions that copper hatchets and "hatchet-coins" served as bride-wealth and grave goods in pre-Hispanic Ecuador (Salomon 1986: 92–94, 141, 214). Shimada (1985, 1987) has found that hatchet-shaped pieces of copper were produced in large quantities on the North Coast of Peru in the Middle Horizon, suggesting that they may have served as a currency used to obtain *Spondylus*, gold, and other valuables from Ecuador (cf. Hosler, Lechtman, and Holm 1990). In the southern Peruvian valley of Chincha, Rostworowski de Diez Canseco (1977a, 1977b) has adduced documentary evidence for the existence of specialized merchants dealing in copper, Ecuadorian *Spondylus* shells, and other items along the coast at the time of the Spanish conquest and suggests that their activity would have been even more intensive prior to the Incas.

The many indications that ecologically motivated "vertical archipelago" organization was not ubiquitous in the ancient Andes were acknowledged in an early volume focusing on "Andean ecological complementarity" (Masuda et al. 1985), and a number of more or less explicit dissidents have expressed doubts about the alleged concern of Andean societies with community self-sufficiency. Murra was the first to concede the existence of commercial activities in some parts of the Andes (Murra 1985: 4). It has even been suggested that the trade in *Spondylus* was the basis of a maritime exchange system stretching from southernmost Peru to the west coast of Mexico (Hosler et al. 1990; Lathrap, Collier, and Chandra 1975; Murra 1975; Paulsen 1974, 1977; Salomon 1986: 92).[7] Other nonperishable goods exchanged over long distances in the Andes prior to the Inca included tin, bronze, silver, gold, turquoise, greenstone, quartz crystals, obsidian, and fine ceramics, but it should be recalled that most of the precolonial valuables were perishable items such as fine textiles, coca, hallucinogenic plants, and tropical bird feathers (cf. Earle 2001; Isbell 2012: 232).

Many of these examples conform well to modern conceptions of "trade," defined as a relation of *indirect* access, based on the mediation of specialized middlemen pursuing goals of their own.[8] In periods of political fragmentation, such as the so-called Intermediate Periods (200 BC–AD 600 and AD 1000–1438), evidence of long-distance exchange may reflect mercantile trade to an

extent impracticable in the empires of the Middle and Late Horizons (AD 600–1000 and AD 1438–1532).[9]

Though generally more or less embedded in social ties and obligations to local elites, it would be unwarranted to assume that Andean traders were always as dependent and "administered" as the Inca *camayoq* delivering their goods to Cuzco. This assumption was the point of departure for Murra's early discussion of trade and merchants in the Inca Empire (Murra 1956: ch. 7), which remains an essential source for the historical evidence of indigenous Andean commerce. His understanding at that time of what was later to be called "vertical archipelago" organization was that its pervasive distribution derives from the impact of large-scale, political schemes to convert trade into tribute (Murra 1956: 235). [10]

In the Titicaca Basin, vertical archipelagos and strategic allocation of assigned colonists undoubtedly predate Inca expansion (Mujica 1985; Pease 1982; Wachtel 1982), but even in these areas they did not preclude specialized, trans-Andean exchange activities.[11] For instance, Callawaya herbalists traded tropical plants throughout the southern highlands since the Early Intermediate Period (Isbell 1988: 181; Wassén 1972). Another resource that was widely traded in the southern highlands was guano from islands off the Pacific coast (Julien 1985). The general absence of currencies did not preclude a "vigorous trade" among indigenous peoples of the Andes (Stanish and Coben 2013: 431).

Although not applying the terminology of world-systems analysis, Tim Earle (1997, 2002) has consistently approached pre-Hispanic Andean exchange from the perspective of political economy, rather than functionalist assumptions of collective problem solving. D'Altroy and Earle (1985) show that, although wealth objects in the Inca economy were not *directly* convertible into subsistence goods, as in markets, they provided indirect access to staples through control over labor and land. The Inca emphasis on "administered" trade was a strategy for centralized political control over the flows of valuables that in other periods and other parts of the Andes were subject to competition and conflict. Rather than suggesting a uniquely Andean economic rationale, such as ecologically motivated self-sufficiency, the metabolism of the Inca Empire can thus be viewed as a specific transformation of structures and motives that are familiar to archaeologists studying other premodern civilizations. The fact that the interpretation of archaeological traces of long-distance exchange remains a contested topic, indicating trade to some and tribute to others, suggests that, at the abstract level of societal metabolism, the distinction may not be as crucial as it has previously seemed. Phrasing the discussion of the exchange of "primitive valuables" in terms of "prestige goods," "commodities," or "wealth finance" may primarily be different ways of framing a recurrent concern with controlling the symbols of power (cf. Sherratt 2004). Merging the categories of "prestige-goods exchange" and "administered trade" (Earle 2001: 307), for

instance, allows the meticulously organized Inca state to assume the appearance of an arena for political rivalry over fetishized preciosities.[12]

To the extent that our understanding of political economy and center-periphery dynamics in the pre-Hispanic Andes could benefit from a world-systems approach, it is appropriate to review the rare attempts that have been made so far (Kuznar 1996, 1999; La Lone 1994, 2000). La Lone (1994) and Kuznar (1999) have suggested that the Inca Empire can be understood as a world system, in which Cuzco was the core. Although Wallerstein would have referred to *Tawantinsuyu* as a "world empire" rather than a "world system," La Lone's observations on the Late Intermediate Period emergence of Inca hegemony are indeed relevant to the present discussion. He notes, for instance, that it was much easier for Cuzco to establish a power monopoly than it had been for the competing trade centers in Mesopotamia, the Aegean, or ancient Mexico (Kuznar 1999: 29). His reference to Ekholm and Friedman (1979) suggests that Andean highland empires such as the Wari and the Inca thus were more comparable to those of ancient Egypt than to these centers. La Lone (1994: 31–32) also pertinently observes that the Inca tribute economy required that both labor and land were subtly disentangled from kinship and community control. Kuznar (1999) raises several important issues regarding the center-periphery dimensions of the Inca Empire, including the role of unequal exchange, but does not apply his world-system analysis to Andean prehistory prior to the Inca expansion. In applying world-systems concepts also to earlier periods in Andean prehistory, La Lone (2000) designates Early Horizon coastal polities as "core," Chavín de Huántar as "semiperiphery," and tropical forest regions as "periphery." Although his suggestion that the subsequent oscillation between coastal and highland dominance implied shifts between core and semiperipheral positions is easy to accept, the classification of tropical forest populations as "peripheral" remains analytically underdeveloped.[13]

POLITICAL ECONOMY, RITUAL TECHNOLOGIES, AND LONG-DISTANCE EXCHANGE IN THE ANCIENT ANDES

Long-distance exchange in so-called primitive valuables can be fully understood only when its local, cultural incentives are assessed. The symbolic schemes underlying such cultural incentives are generally lost to archaeology. In the Andes, however, the prospects of a more profound understanding are unusually bright, thanks to the rich historical record. Studies summarized by Murra (1975), Paulsen (1974), and Pillsbury (1996), for instance, reveal some of the symbolic significance of *Spondylus* shell, imported to Aspero in the Initial Period, 1800–900 BC (Feldman 1987: 13), and a major trading commodity already in the Early Horizon, 900–200 BC (Keatinge 1981: 183–184). *Spondylus* generally does not occur naturally much further south along the Pacific coast

than the Gulf of Guayaquil, which means that all specimens discovered archaeologically in Peru must have been brought there from Ecuador. In the Inca Empire, *Spondylus*, known as *mullu*, represented rain and fertility and was considered the principal food of the gods. Besides being used for ritual offerings, *Spondylus* was fashioned into ornaments that have been found in elite burials in various parts of Peru from the Initial Period and onward. Access to *Spondylus* shell for ritual and redistribution appears to have been a major basis of political power in the agricultural theocracies of Peruvian prehistory. Gold and silver were also highly valued in pre-Hispanic Peru, but, like *Spondylus*, more in terms of their culturally specific symbolism than in terms of abstract exchange value (Helms 1981; Lechtman 1984; Owen 2001; Sallnow 1989).

The Inca based their power on the strategic deployment of valuables such as *mullu*, cloth, and other goods, suggesting a system of gift exchange embedded in kinship, reciprocity, and ritual. Morris (1982, 1985) has demonstrated that impressive "administrative" centers such as Huánuco Pampa were primarily designed for hosting the large-scale, ceremonial consumption of maize beer (*chicha*). It is also noteworthy how concepts and institutions such as *mitmaq* (relocated ethnic groups), *yana* (retainers), *aclla* ("chosen women"), and *capacocha* (human sacrifices) all reflect a fundamental Inca strategy of redistributing people as readily as goods (Julien 1982; Murra 1982; Pease 1982; Rowe 1982; Wachtel 1982). Many of these relationships seem to have been based on traditional aspects of kinship and affinity. For example, *yanacona* (traditionally translated as "servants") appear often to have been actual or adopted kinsmen of their masters (Salomon 1986: 171–172). The accumulation of "chosen women" conceived of as the property of the Inca king, and their use as labor or items of redistribution in alliance making, appear to be a permutation of the widespread practice of privileged polygyny (cf. Salomon 1986: 129–130). The fact that the *yanacona* received *aclla* from the hands of the king and resided in the vicinity of the royal court (cf. Salomon 1986: 132–133, 169) indicates that their status may even have had an ingredient of uxorilocal bride-service. Hypergamy was certainly part of the cultural logic of royal marriage alliances with the local lords whose realms were incorporated into *Tawantinsuyu* (cf. Murra 1986: 51). Such elite intermarriage is a way of reorganizing ethnic boundaries and establishing new ethnic affinities and loyalties through kinship because ethnicity is fundamentally an abstract, extended notion of kinship. Ethnicity and kinship both not only evoke images of common essence that imply solidarity and reciprocity, but also obligations that are frequently deferential and asymmetric.

Inca domination was thus achieved by establishing an atmosphere of kinship and reciprocity between Cuzco and the various local elites that reproduced local, pre-Incaic structures on a vaster scale. The political rationale of Inca expansion, however, was Cuzco's unwillingness to let its position as "middleman"

between the four divisions (*suyu*) of the empire depend on the vicissitudes of market exchange. Products from coast, highland, and jungle were redistributed within *Tawantinsuyu* according to patterns that largely reflected pre-Incaic demand, but within its limits trade was "administered" through various forms of labor service (Murra 1982; Rowe 1982) designed to maintain the metabolic flows of the empire. The south Andean "vertical archipelago" model was used as the blueprint for a successful imperial institution, by means of which Cuzco could lay claims to lands of its own everywhere and set up colonies to supervise their management. Mercantile activities survived on the fringes only. The Callawaya, the *mindalá*, and the merchants of Chincha thus represent the expanding frontier of *Tawantinsuyu*, but they undoubtedly had plenty of predecessors throughout the pre-Incaic Andes.

Archaeological research has revealed that the Middle Horizon expansion of Wari and the Late Intermediate Period expansion of the Chimú capital of Chan Chan appear to have been based on strategies of institutionalized generosity to which Cuzco was merely an heir. Sites designed for *chicha* consumption and other redistributive activities are diagnostic of all three periods (Isbell 1987, 1988: 183; Klymyshyn 1987; Mackey 1987; Morris 1982), and the rationale for expansion was probably similar. The Wari, Chimú, and Inca empires represent attempts to consolidate preexisting interaction spheres into corporate polities, to guarantee the supply of exotic goods crucial to the maintenance of power. The allocation of valuables provided elites with access to the labor and resources of dependent territories, a part of which was invested in infrastructure for agricultural production and manufacture (yielding, e.g., maize, textiles, metallurgy, and shell ornaments), thus further enhancing elite redistributive potential.

The long-term continuities in Andean culture are striking. Colonies of *mitmaq*, redistributive *chicha* drinking, elite accumulation of cloth, and specialized trade in tropical plants and *Spondylus* can all be traced at least to the Middle Horizon. On the northern coast of Peru, the same system of fortifications was used repeatedly in the Early Intermediate, Middle Horizon, and Late Intermediate Periods (Topic and Topic 1987: 55). Similarly, the Inca road network traced by Hyslop (1984) largely built on the main arteries of Andean exchange established much earlier (cf. Raymond 1988: 297–298; Salomon 1986: 151, 158; Schreiber 1987: 92; Shimada 1987: 132). Late Intermediate ethnic boundaries, conspicuously manifested in costume, were kept largely intact throughout the Late Horizon (Hastings 1987; Rowe 1946, 1982: 110). Cosmology seems similarly timeless. Symbols and iconographic patterns, such as the "staff" motif (cf. Isbell 1988: 180) and the connection between *Spondylus* and fertility, can be traced from the beginnings of the Early Horizon through two and a half millennia to the Spanish conquest. Such continuities suggest that, while the fortunes of imperial politics were fluctuating in the pre-Hispanic

Andes, the local building blocks (ethnic groups, cultural traditions, communication routes) were surprisingly constant. In light of this situation, a summary of Andean prehistory would describe the various regional populations as nodes in a network more permanent than the recurrent political attempts to encompass it (Figure 17.1). The dynamic of expansion and decline in space and time thus lends itself well to world-systems analysis, such as tracing the "implosion" of peripheries into centers (Frank and Gills 1993: 96) in ways similar to those identified in Mesoamerica and the Old World.

Throughout southern and central Peru, hilltop fortifications indicate that the collapse of Wari and Tiwanaku around AD 1000 left fragmented, local polities warring against their neighbors. By the end of the Late Intermediate Period (AD 1000–1438), the urban craft centers of the central coast and the Titicaca Basin had been long abandoned, but a trade-oriented Chincha polity on the south coast continued to convey *Spondylus* into the southern highlands. One of Chincha's primary trade connections in the southern highlands was a chiefdom centered on the town of Cuzco, only kilometers away from the ruined Wari outpost of Pikillaqta on the southern border of the former empire, where it controlled trade routes into the *montaña* and the Titicaca Basin. Cuzco's first step toward the Late Horizon empire of *Tawantinsuyu*, which in many respects was a revival of the Wari Empire of which it had once been an outpost, was to subdue the neighboring Chanca of the Wari heartland, who blocked what was to become the Inca highway to Chinchasuyu.

Although, as mentioned, politically controlled exchange may be difficult to distinguish archaeologically from commerce, a cursory interpretation of the shifting dynamics of Andean accumulation suggests some possible ways in which political consolidation into states and empires can leave traces in the archaeological record. An obvious difference between politically unified regions and nonpolitical interaction spheres is the capacity of corporate polities for militarism. Also, previously united regions are more easily annexed to other, expanding polities (cf. Salomon 1986: 134). By contrast, like those ethnic groups that allied themselves with the Spaniards against Cuzco, they may also have been more easily lost in times of crisis. A third aspect, therefore, is the tendency of long-standing, political unification to produce a sense of regional ethnic autonomy. Fourthly, there is a difference in the scale of vulnerability. Although empires are designed to prevent them, the impact of inevitable disturbances in crucial exchange flows will have repercussions over a wider area if what is threatened is not a local elite but an extensive imperial superstructure. The abruptly truncated Middle and Late Horizons testify to this. Finally, the emergence of new centers of accumulation tends to occur on trade routes just beyond the political reach of antecedent polities (cf. Frank and Gills 1993: 96). This pattern seems to be applicable to a long series of Andean centers, including Chavín de Huántar, Moche, Nazca, Wari, Cajamarca, Chan

Chan, and Cuzco, each of which emerged on the periphery of earlier centers. Significantly, the Inca civil war that met the Spaniards suggests that Quito was about to be added to this list.

CONCLUSIONS: WORLD-SYSTEMS DYNAMICS IN THE PRE-HISPANIC ANDES

Voluminous historical and archaeological research over the last few decades has illuminated the pervasiveness and ideological subtleties of what Maurice Godelier (1977) has called the "Inca mode of production." Through strategic deployment of prestigious gifts, political leaders in Andean societies converted long-distance imports of valuables into labor in craft production, military conquest, ceremonial architecture, and landesque capital such as terraces and irrigation canals. Products such as cloth, *Spondylus* shell, and maize beer have further aggrandized their potential to accumulate the productive capacity of labor, land, and capital. Although the means by which valuables were procured has varied in time and space, from exchanges resembling modern commerce to the "administered" trade within politically controlled territories, the incentives for procuring them have been essentially the same through three millennia up until the Spanish conquest. The pervasive cultural acceptance of this "mode of accumulation" (Frank and Gills 1993) in the Andes justifies a focus, in this synoptic perspective, on the role of shifts in routes and patterns of procurement for geographical patterns of accumulation, expansion, and decline, that is in world-system transformations of center-periphery relations. A central concern of such a world-system perspective is the spatial correlation between significant trade routes and the distribution of major centers of accumulation. Such correlation is possible to establish for long sequences of Andean prehistory from Pre-Ceramic Aspero to Late Horizon Cuzco (cf. Hornborg 1987, 1998, 2000).

Some additional observations can be made at this point. Firstly, every "interaction sphere" or politically consolidated territory is characterized by a hierarchy of accumulating centers. As observed by D'Altroy and Earle (1985) for the Inca Empire, because bulk goods (or staples) are not transported over as great a distance as prestige (or wealth) goods, the accumulation of such surplus will occur in a network of local centers rather than only in the imperial capital. This distinction between the extent of bulk-good exchange and prestige-good exchange (Chase-Dunn and Hall 1991) applies also to interaction spheres such as Chavín, which were not politically integrated. The spatial configuration of center-periphery dimensions should thus be visualized as a site hierarchy, rather than a simple concentric polarization between core and perimeter.

Secondly, accumulation at such centers cannot be traced or calculated only in terms of a surplus of matter and energy because investments of labor and

land are inextricably intertwined with cultural evaluations of prestige goods in such modes of accumulation (Hornborg 2000). Cultural evaluations of *Spondylus* shell or tropical herbs will determine the quantities of labor that can be mobilized through these ritual technologies. The best conclusion may thus be that the catalytic potential of such exotic imports was formidable throughout Andean prehistory, particularly if related to the more modest investments of labor in their extraction. "Unequal exchange" in these contexts could perhaps be conceptualized as an asymmetric transfer or net import of (culturally determined) accumulative potential.

Thirdly, shifts in the extent of subjectively experienced collective identities can often be mapped and traced over time. The ethnic groups that had been incorporated into the Inca Empire (Rowe 1946: 184, map 3) all had their previous histories of ceremonial cohesion, economic cooperation, political unification, warfare, and linguistic intelligibility. Such cultural continuities suggest a shifting network of regional populations that can sometimes be traced through the recurrent political attempts to encompass them (Figure 17.1). The major traditional trade routes through which they communicated with each other are perhaps best reflected in the Inca road system (Hyslop 1984). For instance, there were obviously very ancient routes that connected the upper Marañon (Chavín de Huántar) with the north coast (Casma), the south coast (Paracas-Nazca), and the Mantaro Basin (Wari), as well as routes that connected the south coast (Nazca), the Titicaca Basin (Tiwanaku), and the tropical slopes east of Lake Titicaca. These ancient trans-Andean trade routes influenced not only the geographical distribution of centers of accumulation, but also the expansion of languages and ethnic identities.

The "horizons" of Andean prehistory have left marks that can be retrieved by both archaeologists and linguists (cf. Heggarty and Beresford-Jones 2012), but it is important to recognize that political consolidation was not their underlying essence. Political projects such as Wari and *Tawantinsuyu*, like production systems, stylistic homogeneities, and linguistic dispersals, were ultimately only reflections of prior and more profound socioeconomic processes, namely the integration of extensive networks of long-distance exchange. The analytical toolbox of world-systems analysis can account for all these different aspects of prehistoric macrodynamics: the political economy of long-distance prestige-good exchange and surplus production; the inevitable shifts in control over trade routes and in the location of centers of accumulation; the recurrent attempts to politically encompass vast networks of unpredictable exchange relations; and the cultural, stylistic, iconographic, and ethno-linguistic processes of homogenization. Aspects that have been recognized as Chavín and Tiwanaku are traces of ancient trans-Andean interaction spheres connecting, respectively, the Marañon and the Llanos de Mojos with the Pacific coast (Browman 1978; Burger 2008, 2013; Contreras 2011;

Isbell 2008; Janusek 2004; Kolata 1993; Lathrap 1971; Mujica 1985; Rodriguez Kembel and Rick 2004; Stanish et al. 2010; Torres 1987; Wassén 1972). What has been identified as the Wari and Inca empires were political attempts to control such trans-Andean flows of valuables between the tropical eastern slopes and the arid coast. A world-system perspective on pre-Hispanic social processes in the Andes can shed light on a wide range of phenomena that have not previously been theorized within such a framework. In addition to situating the specific, "vertical" institutional arrangements for procuring long-distance imports within a wider, comparative framework for understanding a concern with controlling the symbols of power, world-systems analysis can account for the shifting location of dominant centers of accumulation, the geography of conflict and military expansion, patterns of ethnicity and linguistic dispersals, the diffusion of horizon styles, and the cultural fragmentation that tends to occur after the decline of a hegemon. Applied to Inca historiography, it can provide a structural account of historical events and particularities such as the siting of Cuzco, its incentives for political expansion, the layout of its imperial road system, the significance of the war with the Chanca, and the civil war between the half-brothers Huascar and Atahualpa. Viewing history through the lens of world-systems analysis allows us to rethink familiar ideographic details in terms of structural patterns derived from social theory.

NOTES

1 A "world-system" perspective focuses on interregional patterns of interaction and their shifts over time, attributing local developments to the trajectories of larger reproductive totalities (Wallerstein 1974). Tracing the dynamics of such interregional totalities, e.g., it identifies processes of economic accumulation, political expansion, shifts in major trade routes, and decline. For statements on the application of world-system analysis to premodern societies, see Chase-Dunn and Hall 1991; Denemark et al. 2000; Frank and Gills 1993; Hornborg 2014; Kardulias 1999; Sanderson 1995. I hope to show that a generalized world-system perspective, if not always identical with Wallerstein's (1974) observations on sixteenth-century Europe, provides a useful theoretical framework for understanding long-term economic, political, and cultural macroprocesses in the pre-Hispanic Andes.

2 Murra's emphasis on the dominance of nonmarket principles in Inca society was buttressed by his "antimarket" substantivist stance (Mayer 2013). The "formalism" of world-system models, however, is generally no less critical of the polarizing logic and core-periphery inequalities of market systems. Identifying the operation of market principles in the pre-Hispanic Andes should thus not be interpreted as "admiration" of such principles (Burger 2013: 319), any more than Baudin's (1961) interpretation of the Inca Empire as "socialist" reflected an admiration for socialism (cf. Mayer 2013: 314n1).

3 Nevertheless, although the Inca Empire was founded on the compliance of its myriad laborers, it is important to remember that some products such as fleece, cloth, *mullu* (*Spondylus* shell), precious metals, maize, and tropical plants were delivered to Cuzco and other centers through material flows that archaeologically would be difficult to distinguish from tribute in kind (cf. D'Altroy and Earle 1985). Another qualification is that many of these products represented embodied agricultural land and pastures as well as labor (cf. Bogadóttir 2012).

4 To my knowledge, the only previous instances where a world-system terminology has been applied to Andean prehistory are Hornborg (1987, 1998, 2000), La Lone (1994, 2000), and Kuznar (1996, 1999). Portions of my previous attempts have been incorporated into the present text.

5 After scrutinizing an extensive amount of literature on Andean archaeology and ethnohistory for an answer to the perplexing question of why world-system analysis is next to absent in the discourse on Andean prehistory, it appears that the issue of whether ancient long-distance exchange in the Andes should be classified as "commercial" or "administered" preoccupied Andeanists primarily in the Cold War period – when the binary of market versus state was a paradigmatic distinction – and culminated in the 1970s and 1980s (cf. Mayer 2013). Judging from more recent contributions (e.g., Contreras 2011; Hirth and Pillsbury 2013b; Stanish et al. 2010), the distinction is no longer a major concern. This should make it easier to suggest world-systems interpretations of archaeological evidence of long-distance exchange in the Andes.

6 If this argument sounds like a formalist position in the old "formalist versus substantivist" debate in economic anthropology from a few decades ago, it must be said that, in contrast to that position, the object is not to try to attribute some kind of universal rationality (such as "maximization") to all human actors. In fact, rather than being concerned with the cultural specifics of human motivation, of interest here is only the macrolevel material logic of long-distance exchange, as geared to the reproduction of political hierarchies and world systems. Like formalism in economic anthropology, world-systems analysis represents an inclination toward abstract perspectives, but rather than to promote the ideology of neoclassical economics, it is concerned with understanding the emergence of interregional inequalities of power.

7 Others have suggested that the trade in *Spondylus* generally followed overland routes (Hocquenghem 2012; Topic 2013: 349).

8 The degree to which premodern conveyors of goods were pursuing private profits is a significant variable that deserves close scrutiny (cf. Isaac 2013), but it may not necessarily make a decisive difference for the general dynamics of world systems. Regardless of whether it was driven by the desire for commercial profit or political prestige, the pursuit of exotic valuables not only leaves similar traces in the archaeological record but would also have been subject to similar logistical constraints. Furthermore, the different cultural ways in which "primitive valuables" were converted into land, labor, and capital may have yielded materially similar effects, such as agricultural intensification, craft production, urbanism, and militarism. E.g., although there are significant differences between the archaeological traces of Wari and Tiwanaku, both relied on pivotal trade routes, investments in landesque capital, the manufacture of valuables, elite generosity, urban settlements, and armies.

9 Although all three Andean "horizons" can be identified in the archaeological record in the wide expansion of specific iconographies and artistic styles, the Early Horizon (900–200 BC) expansion of Chavín appears to reflect different sociopolitical conditions than those underlying the Middle Horizon expansion of Wari and the Late Horizon expansion of Cuzco. Moreover, the Middle Horizon comprised two quite different processes of sociopolitical integration: Wari over much of the Peruvian Andes, but also Tiwanaku in the southern highlands. Chavín and Tiwanaku suggest less militarism and less centralized control (Burger 1992, 2008; Contreras 2011; Isbell 2008; Janusek 2004; Kolata 1993; Rodriguez Kembel and Rick 2004; Stanish et al. 2010). Reminiscent of "interaction spheres" rather than empires, Chavín and Tiwanaku thus appear to have provided more scope for mercantile trade than the Wari and Inca polities.

10 The relatively small size of Inca centers, compared to Mesoamerican cities, has been interpreted as being related to the Inca discouragement of marketplaces (Isaac 2013: 442–443), which raises the question of whether the larger urban centers of earlier Andean societies (e.g., Chavín de Huántar, Wari, Tiwanaku, Chan Chan) should be interpreted as more compatible with commerce.

11 It has also been suggested that Tiwanaku established vertical archipelagos of colonists, whereas pre-Tiwanaku Pucara relied on indirect access through exchange (Mujica 1985).

12 It is important to establish that the political significance of valuables is not necessarily positively correlated with their quantity in the archaeological material (cf. Earle 2001). In fact, it has even been suggested that the correlation could be the inverse (cf. Ekholm Friedman and Friedman 2008). Moreover, the quantity of valuables in the archaeological material may simply be a reflection of the proportion of circulated valuables that consisted of nonperishable items. In the Andean highlands, e.g., very few traces would be likely to remain of key valuables such as fine cloth, tropical plants, and bird feathers.

13 It is no doubt possible to argue, however, that the "catalytic" potential of exotic imports, whether from Amazonia or coastal Ecuador, to be converted by Andean lords into labor, exports, military conquest, or landesque capital, would have been greater than the amount of labor invested in extraction and transport. In this sense, Amazonia and coastal Ecuador were undoubtedly "peripheral" to the political economies of the Andean coast and highlands. To substantiate such an analysis, it would be necessary to estimate, e.g., the quantity of labor time that was invested in the extraction and transport of *Spondylus*, compared to the amount of labor that it could be converted into, by means of gifts or ritual sacrifice. The designation of different areas as "core" versus "periphery" is more straightforward when applied to urban manufacturing centers relying on imports of raw materials, e.g., the Chimú capital of Chan Chan (cf. Topic 2013: 340–343).

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EIGHTEEN

EMPIRE, CIVILIZATION, AND TRADE: THE ROMAN EXPERIENCE IN WORLD HISTORY

Peter Fibiger Bang

For now that the world has been united under the majesty of the Roman Empire, who does not think that life has been improved through the commercial exchange of goods and by the partnership of a blessed peace, and that all things, even those which had previously been hidden from sight, have now been made commonly available. Pliny, *Natural History*, Book XIV, 1.

This is a famous passage, often quoted, an irresistibly emblematic expression of the blessings of the Pax Romana. Empire had tied the societies of the Mediterranean together in community, this is the attractive image we are given, and improved material well-being through intensified commercial exchanges; the range of goods available to the population had been much expanded. Empire, civilization, and trade, our three thematic concepts, appear here together seemingly in perfect unity. It is, however, also an observation heavily imbued with rhetoric and normally cited out of context. For Pliny (ca. 23–79 CE) did not offer this remark in celebration. Quite the reverse, he was dismayed to note that, despite an increasing flow of objects, materials, and information, many an ancient specie and name of tree had still disappeared from collective memory. His contemporaries had turned away from study and the liberal arts, he concluded, to cultivate only greed: "[T]he wide expanse of the [Roman] world and the fullness of things has become a curse."[1]

The moralizing slant of Pliny's reflections is entirely typical of Roman upper-class society. Left, right, and center, classical authors abound with indignant complaints that people had become slaves to money making. From a

modern perspective, the dominant discourse seems strangely averse to commercial values. What should we make of this? Among the "learned," opinions have diverged over the years, but positions have tended towards polarized extremes. Some have emphasized the marginality, even lack of commercial institutions; others, in reaction, have stressed the significance of trade and the wide extent of market integration. But this is a misleading dichotomy. The Roman Empire was a complex preindustrial society. Our image must combine elements of both positions.[2] The peasantry would often aim to produce most of what they needed within their households; aristocrats frequently valorized landownership over other forms of investment and might ostensibly refer to merchants with contempt. While these and other such practices limited the extent and depth of markets in the Roman world and other preindustrial societies, they are often by an infelicitous expression labelled as "traditional" phenomena: infelicitous, because this analytical procedure tends to imply that trade and markets were not structurally an integral part of this world. Commercial institutions are then either seen as absent or they are approached as an engine of modernization.[3] But this choice is inadequate; aristocrats and peasants were linked in a complex hierarchy. Theirs was a society based on specialization and the division of labor, and it required markets and extensive trade flows to function.[4] From the very beginning, complex preindustrial societies generated and required significant trade. To fill this need, some cities also emerged as organizational hubs within these wider trade currents, and where merchants acquired greater prominence. Cities of this kind were, perhaps, never in the majority, but neither were they the incidental exception; their role was structural. One thinks, for instance, of the Hanseatic League of the medieval Baltic or the example of ancient Assur, analyzed by Barjamovic in this volume.

If trade and markets were an intrinsic feature of complex preindustrial societies, there is nevertheless still a history to be described and explored.[5] At the level of transcontinental trade flows, Barjamovic estimates that the annual trade from Bronze Age Assur, linking Mesopotamia and the goods from much further east to Anatolia, may have channeled some 24 tons of tin and 48,000 pieces of cloth. By comparison, the combined annual imports from India to Europe by the English and Dutch East India companies counted, among other things, some 3,400 tons of pepper and 600,000 to 700,000 calicoes by the turn of the seventeenth century.[6] Of course, juxtaposition of two such sets of decontextualized and isolated figures of phenomena widely separated in time and geographical location, means little in itself. The numbers certainly offer no basis for a precise, let alone serious, statistical comparison; they are offered here only as crude, impressionistic pointers. For one thing, the selected goods are not even of the same type. In relative terms, the values represented by the Assyrian figures might very well, but need not, have been as great as or greater than the early modern quantities when compared to the much smaller population

of Near Eastern Bronze Age society. But scale is precisely of the essence here. The size of complex, what may be called "civilized," preindustrial societies had expanded enormously from the mid-Bronze Age to the early modern period.[7] Quantities of objects, materials, and people, however, did not merely increase; greater amounts and more extended communication lines required an expansion of infrastructure and strengthened organizational capacity.

When Justinian (r. 527–565), for instance, was mounting a diplomatic offensive to bypass the Persians in the import of Chinese silks to the Roman world by enlisting the services of the Ethiopians and thus avoid transferring money to his main military adversary, his hopes were quickly dashed: "For," Procopius writes, "it was impossible for the Aethiopians to buy silk from the Indians, for the Persian merchants always locate themselves at the very harbours where the Indian ships first put in (since they inhabit the adjoining country), and are accustomed to buy the whole cargoes."[8] For millennia, the trade in high-value items running across Eurasia had been regionally segmented, organized as a set of loosely interlocking neighboring systems, like pearls on a string. But the Iberian circumnavigation of the globe would change all of this. As Serge Gruzinski remarks in a recent book, for the first time the entire system could be known from beginning to end. The effects were dramatic, like a short-circuiting.[9] Where trade had been conveyed by a set of horizontally linked networks, the entire operation could now be organized within a unified hierarchy and even a single enterprise. This change was the achievement of the Portuguese, quickly followed by the Dutch and the English East India companies. By the turn of the seventeenth century, the *Vereenigde Oost-Indische Compagnie* (VOC) employed well more than 30,000 people in a transcontinental network stretching from Indonesia via Cape Town to Amsterdam.[10]

Another milestone in the history of expanding civilization and trade, it is the contention of this chapter, can be identified in the formation of vast universal empires. Long after the trading network of Assur recedes from sight, the city reemerges on the scene of history as a mighty military conqueror that subjects most of the ancient Near East to its empire (911–605 BCE). Sizeable populations were forcefully moved, tribute extracted from defeated communities, and magnificent residential cities built, appointed with marvelous palaces and awe-inspiring temples. Nineveh, Nimrud, their rich archaeological remains testify to the unrivalled ability of empire to concentrate consumption. Sometimes such gigantic centers of consumption have been seen as parasitic. However, even as these cities tapped the wealth of their subject territories, the concentration of demand and population generated, not to say necessitated, more diversified forms of production and more forceful commercial currents to supply their needs. Succeeding generations of conquerors would follow in the footsteps of the Assyrians, mimicking, rivalling, and surpassing their achievement. In Mediterranean antiquity, the culmination came with the

consolidation of the city of Rome as the seat of an empire stretching from Scotland to Nubia.[11] With a population believed to have reached about a million by the beginning of the common era, the "great whore" on the Tiber did not only attract the prophetic wrath of the author of the *Book of Revelation,* but also, much to his dismay, an endless stream of merchants eager to profit from what would remain the single most voracious market concentration in European history until the dawn of industrial production. When the profits from empire disappeared, the shrinking population of the city of Rome was left to nestle for centuries in an outsized "ruin-scape" and handy quarry of building materials. "Wrecks of another world whose ashes still are warm," as Byron romantically mused.[12] Many students of ancient trade have been attracted to Wallerstein's notion of a world system, but his work is founded on a distinction between the latter and a more nebulous concept of world empire. Rome, the paradigmatic imperial titan, confronts us with the task of exploring and developing this alternative, relatively neglected theoretical avenue of world empire. That precisely will be the attempt of this chapter.[13] The following section presents an analysis of empire's ability to extract and mobilize economic resources and the role of markets in this process. The subsequent and final section proceeds to a discussion of the forms of consumption fostered by imperial civilization, linking imperial rule with the spread of both a commerce in luxuries for the elites and more bulky trades to supply the middling groups of imperial society. A generation ago, Braudel identified the key question to be that of *Civilization and Capitalism*; to this pair, the historian of antiquity can add the nexus of civilization and empire.[14]

EMPIRE: THE MOBILIZATION OF RESOURCES

If empire eventually brought peace to the Mediterranean, it also took extraction to another, hitherto unseen level. Extraordinary wealth began to flow into Italy in the wake of Roman victories from the late third century BCE onwards.[15] The display of plunder and spoils in triumphal processions such as that of Aemilius Paulus over Macedon (167 BCE) did not only dazzle the population of Rome, it also quickly causes the modern historian trying to chronicle this and similar events to lose his breath and run out of steam. Cascades of weapons piled up high, 250 wagonloads of plundered artworks, 3,000 men carrying vessels filled with silver coins, the list could go on and on, triumph after triumph, and would have to include the thousands and thousands of slaves captured in war.[16] After plunder came the regular extraction of taxes and rents. These revenue streams significantly reshaped the economy of Italy and tied it into the exploitation of empire. Consortia, backed by large landowners, would bid at public auctions for the right to collect the taxes in some of the choicest provinces. The richest picking, until Augustus added Egypt to the empire,



18.1. The landscape at Las Médulas shaped by the open-cast quarrying in Roman times. Photograph: © Benedict Lowe 2006.

was Asia Minor. During the Mithridatic Wars (80s BCE), when trouble was fomenting in the province, a debt crisis developed in Italy, according to Cicero. An economy of loans and landed estates pledged as security had developed among the Roman and Italian propertied classes to underwrite provincial tax collection and guarantee payment to the republican treasury. When collection collapsed abroad, the whole edifice of securities and credits came tumbling down at home.[17]

Another profitable branch of activity was mining and quarrying. Following hot on the heels of the conquering legions were people seeking to exploit the most attractive natural resources. Stone quarries with particularly treasured properties were confiscated, as were areas with rich metal ores, gold, silver, copper, and lead. Roman mining and quarrying activity have left a visible stamp on territories across the empire from the Egyptian desert to Palestine and Wales, to name but a few, and perhaps most importantly, Spain.[18] The gigantic open-cast quarry operation at Las Médulas rarely fails to inspire awe. At the top of the ridge, water was collected in vast tanks and then unleashed to destabilize the rock and flush the ore down the slopes into the valley bottom for processing, radically transforming the landscape (Figure 18.1). Silver was mined with such intensity at various locations in Spain that the smelting operation can be traced in the historic profile of atmospheric pollutants preserved in the cores drilled out of the Greenland ice cap by teams of scientists. Developing

during the second century BCE and lasting well into the centuries of imperial monarchy, these mines seem to record a peak in premodern industrial activity.[19]

Cumulatively, these developments look impressive, and yet, most Roman historians believe that the imperial state weighed relatively lightly on the population, claiming less than 10 percent and closer to 5 percent of the economy. However, preindustrial economies existed in a universe of small numbers; there was little room for maneuver and constraints quickly began to hem in activity. Modest in absolute terms, the impact of empire was nevertheless significant, a force of dramatic change in the Mediterranean world.[20] An impression of the scale of imperial extraction may be provided by a few simple illustrations. The triumph of Aemilius Paulus, just mentioned, has become especially famous in Roman history because "from that date, the Roman people stopped paying the *tributum*."[21] The *tributum* was a property tax intermittently collected from the citizens to finance the activities of the state. But from now on, tribute was what the provincials paid. The ability to forgo the revenue from the main tax on its own citizenry, while still maintaining the most powerful army in the Mediterranean speaks volumes. Other states and monarchies have frequently found that they have had to step up taxation significantly to meet the demands of warfare. Rome, however, could not merely pass on the burden to its provincial subjects. The profits from the empire even allowed the state to embark on a journey that, under Augustus, saw the army of citizens transformed into a standing professional force of a size which European states would only begin to match again, with great effort, during the late seventeenth and eighteenth centuries. Even so, that did not exhaust the profits of empire.[22] At the same time, the gains from victory allowed the city of Rome to grow to an inordinate size. In the second century AD, according to a recent estimate, the size of Rome may well have equaled the combined population of most European cities in the empire, outside of Italy and Greece.[23] In Italy, Rome was of course exceptional, but not the only one to benefit. For instance, much of South and Central Italy saw the rise of a slave economy. Normal-sized cities such as Pompeii and Herculaneum bear witness to the general affluence that imperial Italy came to enjoy. An economic miracle, as Aldo Schiavone pointed out some time ago, empire-style.[24]

Many of the slaves who were pressed into service, might perhaps rather have preferred the acerbic sting of Tacitus, "where they create a wasteland, they call it peace," to describe the effects of Roman power.[25] Empire, however, did not just bring wanton destruction and ruthless extraction, although it did all that; above all, it was capable of mobilizing economic resources, some of them otherwise idle.[26] Redistribution may begin to describe what was going on, but there is more to the story. In Rome, for instance, the emperors spent considerable amounts of tax grain to feed a sizable part of the population. Later, they also added some oil, wine, and meat. But the distributions of food rations

did far from satisfy demand. The people also had to obtain many products through the market.[27] Even the imperial state depended heavily on markets and a monetary economy to perform its tasks. The Caesars had coins struck in copious quantities of silver, gold, and copper to pay the soldiers and to receive as tax payment.[28] Many dues, in the Roman world, were defrayed in kind. But the needs of the imperial authorities were far more diverse than the main products of the peasant majority. The process of tax collection would have saddled the government with far greater supplies of grain than it could possibly put to use. The excess had to be sold on the market, as the late Keith Hopkins argued, some through the imperial household, and some, perhaps increasingly so, by the tax payers as more taxes were set in coin.[29] What was true of the imperial state was, in equal measure, true of the aristocratic, landowning elites of the empire; they depended on the sale of substantial parts of the agricultural produce from their broad acres to finance the elaborate, urban-centered lifestyles that they had developed. Access to markets, in short, was crucial for the capacity to mobilize the wealth of the empire. Across the realm, the consolidation of Roman power saw the strengthening and intensification of urbanism. As the legions pushed westwards and northwards, the urban frontier advanced in tandem. Lyon, London, Trier, Cologne, Vienna, and many more, imperial foundations have decisively shaped the urban profile of Europe.[30]

In macroeconomic terms, the effects of the empire may be approached as a question of protection costs. Preindustrial empires and states do, in many respects, often look like predators, conquering populations and extracting their produce at the threat of armed force. But even in doing so, they offered one significant service in return: protection from rival claimants.[31] As the Roman Empire expanded and imposed its highly celebrated peace on the greater Mediterranean, the number of competitors was greatly reduced and pushed to the margins. Populations inside the empire, therefore, experienced a significant decrease in the burden and incidence of warfare. The costs of offering protection declined within the imperial macroregion. Instead of several middle-sized, mutually hostile, and warring armies, their place had been taken by one large amalgamated force. While the taxes claimed by the central government remained moderate and stable, and in some regions perhaps even fell, the elites of the empire were permitted to reap the rewards of peace in return for their loyalty.[32] The many cities of the empire combined their function as market centers with that of organizing local government. Sitting on city councils, landowners would administer the order of empire and orchestrate the collection of taxes.[33] When the moderate demands of the emperor's government had been met, they were free to benefit. Across the realm, elites seem to have enjoyed rising levels of prosperity that they energetically invested in the conspicuous consumption of status rivalries. The prospects of Greco-Roman



18.2. A selection of Corinthian capitals found across the Roman Empire, from the capital (a), to Philippi in the province of Macedonia (b), Sabratha in the province of Africa (c), and Apollonia in Cyrenaika (d) (the latter two within modern Libya, the Western and Eastern part, respectively). Note the inclusion of Silphium leafs, a plant for which Cyrenaika was famed, on the last specimen. Photograph: Jan Stubbe Østergaard 1996 and photograph: © Jacob Munk Højte 2001 and 2002.

cities everywhere were monumentalized. Fine temples, processional streets, public baths, amphitheaters, column-lined squares, or aqueducts, the precise combination varied with local taste, tradition, and the financial capacity of aristocracies, but the exuberant foliage of the Corinthian capital may serve to neatly encapsulate the splendor of imperial civilization (Figure 18.2).

CIVILIZATION: THE PATTERN OF CONSUMPTION

The consumptive needs of the imperial capital and the army in combination with the advancing urban frontier of taxation expanded the market sphere in the Mediterranean significantly beyond the thin commercial network by which the Phoenicians, analyzed by Christopher Monroe in this volume, had pushed Near Eastern civilization to the West at the turn of the first millennium BCE.[34] Roman historians continue to debate the precise degree of economic integration achieved.[35] But this is a side issue that risks diverting our attention from the main act in the wider historical drama. Under Roman rule, civilization with a capital "C" was expanded and consolidated across the world of the empire. This was civilization, not of the "flat" egalitarian type identified by Rowlands in this volume for sub-Saharan Africa and Southern India, but of the hierarchical, stratified kind where increasingly dense sedentary peasant

populations supported urbanization, elaborate religious institutions, and state formation. New forms of consumption developed as crucial ingredients in the rituals through which the ever-steepening social hierarchies of the empire were articulated and fortified.[36] However, if hierarchy mattered more, this kind of consumption still drew on the "science of the concrete" that had enabled simpler societies to explore the particular properties of plants, foodstuffs, and minerals for use in medicine, magic, and healing or divine cults, eating, decoration, and much more.[37] Yet, that practical knowledge was now appropriated, transformed, and forged into a more elaborate and literary format to support a complex ideological edifice celebrating imperial power, its might, and its reach. The *Natural History* of Pliny, with which this chapter starts, combines information on the political geography of the Roman Empire with descriptions of the many varieties of plants, animals, and minerals to be found inside and outside of the realm and what they might be used for. The reader may revel in long discussions of exotic spices, healing substances, and costly dies, all welded together to form a portrait of the variegated world governed and made available by Rome, its attractions and (treacherous) temptations.[38]

Central to the imperial culture of consumption were notions of the spectacular, of marvel, and of connoisseurship.[39] Of the mistress of Lucius Verus, sometime co-emperor of Marcus Aurelius, Lukian, the versatile man of Greek letters (ca. 120–180 CE), would exclaim: "It was in keeping, too, that our Emperor, kind and gentle as he is, along with all the other blessings that he enjoys, should be so favoured by Fortune as to have such a woman born in his time and consort with him and love him."[40] Panthea, that was the name of the woman, is described as a marvel of perfection in much the same way as other texts might report strange occurrences or wonderful phenomena that ought to be brought to the attention of the monarch and made accessible for his enjoyment, as proof of his blessed rule. To capture the extraordinary qualities of Panthea, Lukian constructs a literary dialogue that plays on the entire register of Hellenic culture. Features of her looks are described with reference to masterpieces of Greek sculpture and painting; her voice and mind are defined in terms of the artistic muses and philosophical virtues. Appreciating the qualities of a Panthea was an act of collecting and of demonstrating refined connoisseurship; it took a person in command of the entire cultural canon.

Failure to master the sophisticated codes of elite consumption, by contrast, might easily lead to ridicule. Some of the most memorable texts of Roman, upper-class discourse mock the deficient dinner host. Lack of *savoir faire* could turn even the most elaborate feast into a merely vulgar and clumsy display in the eyes of high society. Elite consumption was, in some sense, a test of character, where (alleged) flaws stood to be revealed. Shortcomings in education, an inability to control and train the household, pedantic obsession rather than effortless enjoyment – complaints could take on many guises – but more

often than not, pejorative slur was directed at the attempts by the upwardly mobile to elbow their way into the charmed circles of elite society. Roman satirists had a field day lampooning the posh pretentions of freed slaves who had become affluent in their own right.[41] The sophisticated codes of civilization were a mechanism of social distinction and exclusion.

Attempts were also occasionally made to introduce legislation that limited some forms of luxurious consumption or reserved it for particular groups. The wearing of golden rings, for instance, was made a privilege of the aristocratic orders of Rome, the knights and senators. But elite society reached beyond the confines of the Roman city-state; it was imperial and it was too geared towards competitive display to be easily controlled. Much to his dismay, our Pliny could chart a history of steadily more lavish and elaborate types of luxury consumption.[42] As Wallace-Hadrill has argued, a series of waves of fashion rolled across Roman imperial society from the late republic to the first century of the imperial monarchy. Of course, there was no modern fashion-mechanism driving the economy with companies and advertisers systematically seeking to make consumers buy new items, but the status *agon* staged in the public arenas of the cities, and increasingly so of the court, stimulated novelty and introduced more exacting standards.[43] In his discussion of the civilizing process, Norbert Elias observed how early modern European courts reshaped elite lifestyles, all the way from manners to dining, sex, and ceremonial.[44] A similar process was set in motion in the Roman Mediterranean; the spectacles of the circus, the culture of public bathing, private houses fitted with sophisticated wall paintings, works of art, and book collections to provide a grand setting for receiving and entertaining visitors.[45] The list is far from exhaustive. In general, archaeologists emphasize that Roman material culture was more diverse and copious than its predecessors.[46]

Elite demand supported exquisite and dexterous craftsmanship and generated a long-distance trade in works of art, rare materials, and refined products drawn from across the empire and beyond. The rarest and most exclusive objects and materials would often be obtained through networks of patronage where connections in the provinces brought back desirable specimens to Rome. In his poems, Catullus tells us of his highly treasured linen napkins sent from friends in Spain, while Cicero's letters reveal that he as governor was approached by his friends to get wild exotic animals for display in Rome. Local craftsmen and merchants, however, quickly stepped in to complement and expand the supply of such goods.[47] From the Indian Ocean, Chinese silks, pepper, ivory, and frankincense, to name but some, were imported to serve as important ingredients in the ceremonies and rituals of the empire. In absolute terms, the quantities would probably have been moderate, in the sense that it is difficult to see the imperial economy being subsumed under a wider Eurasian world system. For that, the eastern connection was "insufficiently encompassing";

it did not reorient or control the economy of the empire in any meaningful sense, but added an extra current to the great bulk of the Mediterranean world.[48] This is not to say, though, that the quantities of goods involved were trifling. Enough pepper made it into the empire so that small amounts of the treasured substance could be procured by members of an auxiliary regiment stationed on Hadrian's Wall in Britain.[49] Trade with the Indian Ocean predated Roman rule; nonetheless, it seems likely that the incorporation of Egypt into the empire under Augustus provided a boost to commerce from the East and expanded the availability of its goods in the Western part of the Roman world. Over the next several centuries, the trade from the Indian Ocean would continue, undoubtedly with variations that can now only dimly be perceived. It is tempting and traditional to speculate, but doubtful, that there was a serious decline with the onset of late antiquity in the third century AD. As seen in the preceding text, this trade clearly remained valuable enough to enter into the considerations of the emperor Justinian in the sixth century.[50] It is, in short, during the period of the Roman Empire that the pattern of old-world long-distance trade clearly emerges, which the Venetians would then rise to control in the medieval Mediterranean, and the Portuguese, Dutch, and English would break up in the sixteenth and seventeenth centuries.

Economic historians have sometimes treated this kind of trade in charismatic goods and luxurious consumption with a degree of disdain. But what it lacked in absolute bulk, it made up for in value, not to mention social significance.[51] The wealth concentrated in even a single cargo of such goods might exceed the minimum fortune expected of a Roman senator, a person belonging to the very cream of the imperial aristocracy. The demand for prestige goods, fetched from inside and outside the empire, held real economic significance and spawned emulation.[52] As the top ranks of Roman society choreographed their appearance to dazzle the public, those lower down attempted to follow suit as best they could. Among the many people that earned a living in the cities, often catering to the needs of the most affluent, a greater status consciousness seems to have emerged. In the Rome of the Caesars, such people, former slaves in particular, increasingly began to commemorate their lives in grave epitaphs, while in Pompeii, it is possible to chart how simpler forms of the increasingly elaborate style of wall painting found their way into middling households. Even in the countryside, peasants seem to have occasionally spent a little on some of the new types of objects. It should be emphasized that these humbler groups did not simply passively emulate, in a watered-down version, the elaborate styles of consumption cultivated by the upper classes. Instead, they seem to have selectively adopted new objects and goods that fitted their own repertoires and lifestyles, often very far removed from those of the urban elite. In the aggregate, however, the demand of these subelites or middling groups in the empire was considerable. Archaeologically, the trade



18.3. (Overleaf) Consumption in a world of empire: the stamp of civilization (© design Thora Fisker).

Under Roman hegemony, new standards for consumption developed, especially among middling and elite groups across and beyond the empire. As far north as Denmark, in Hoby on the islet of Lolland, an Iron Age elite burial has been found proudly sporting a set of Roman wine-drinking equipment, including two superb silver cups, signed by the Greek maker Cheirisophos, but probably produced in Campania at the turn of the Common Era (Klingenberg 2006; Friss Johansen 1923). The Hoby cups (top of the plate) would have been extremely rare in such a location while several similar specimens are known from inside the empire. Below, two cups are reproduced from the Boscoreale treasure decorated with scenes from the reigns of Augustus and Tiberius; next to these, are one of the so-called Berthouville Centaur skyphoi and the Warren

Cup, showing a homo erotic motif. The complex messages communicated by this type of imagery would not necessarily have been accessible to the largely, not to say wholly illiterate society of the owner buried at Hoby. On his cups were scenes drawn from the Homeric Iliad, one showing the wounded Philoktet, the other King Priamos humbling himself in front of Achilles to have the corpse of his slain son, Hector, returned. Within the village community at Hoby, the heavy weight in silver, possibly indicated on the bottom of each cup, and the extraordinary level of craftsmanship would likely have done more to impress, and perhaps even to inspire alternative stories that could imbue the images with new life.

Chiseled into the bottom of the cups is the name Silius, perhaps the C. Silius Aulus Caecina Largus who, from 14 to 21 CE, was commander of the Roman army stationed in the province of Germania Superior, with its headquarter in Mainz. Most probably, then, the splendid vessels made their way to Scandinavia as gifts given by the Roman authorities as marks of distinction to prominent members of Germanic frontier society. As such, they reveal the power of imperial civilization in all its several dimensions; it was a vehicle of elite integration, exercising a forceful pull on the powerful everywhere, by marking its possessors out in society as members of a wider, awe-inspiring world. At the same time, it was an efficient instrument of exclusion that could be mastered to different degrees. The village grandee would have been able to dazzle his surrounding society through the display of his marvelous drinking vessels; but to an established aristocrat of Roman imperial society, he would have appeared boorish and barbaric, branded by his inability to master the elaborate cultural codes that the exquisite craftsmanship and precious metal had been mobilized to convey. Against the backdrop of peasant life, imperial civilization boasted both splendor, refinement, and exotic range. Another example is the glass cup celebrating the wild, often predatory animals that would sometimes be staged in the circus arena for the enjoyment of the audience. Such goods, of course, were very expensive, but imperial civilization reached deeper and offered people of middling wealth or simply with a little to spare opportunities for consumption too. This could include fine ceramic wares, lamps, or wine and oil.

generated by these groups is documented in the sometimes wide distribution of amphorae for wine, oil and fish sauce, and mold-made oil lamps and tableware, made of terra cotta, but imitating finer metal (Figure 18.3).[53]

The nexus between imperial taxation, urbanization, and new forms of consumption gradually came together with the formation and consolidation of a Mediterranean-wide empire between 200 BC and AD 200. Decline has then traditionally been seen to have had its beginnings in the third century AD. It is important, at this point, to distinguish between change and decline. Much of what has often been interpreted as decline is simply an expression of historical change, with some regions moving to the foreground, while others take a step back. During the fourth and fifth centuries, the urban size of Rome certainly diminished significantly, but some of this decline was offset by the development of a new capital as a vast consumer on the Bosporus: Constantinople. As long as imperial civilization endured, so did the system described in this chapter, for much of the Mediterranean all the way, in fact, into the era of the Islamic Caliphate.[54]

POSTSCRIPT

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NOTES

1 Pliny, *Natural History,* XIV, 1: "*laxitas mundi et rerum amplitudo damno fuit*." Both quotes translated by this author. See Lao 2011 for a discussion of Pliny and luxury.
2 This view is, in fact, a common ground shared by works on both sides of the divide, even if the emphasis differs: e.g., Finley 1985 vs. D'Arms 1981 and Pleket 1990.
3 Polanyi 1944 is an ideal-typical example of the former alternative, Kautsky 1982 of the latter.
4 A key point of Crone 1989, an extensive division of labor is the key defining feature.
5 Cf. the argument advanced in the introduction and the contributions of Versluys and Pietersee to Pitts and Versluys 2015: A very long history of globalization requires differentiation and identification of a series of historical phases.
6 Steensgaard 1990: 120 and 126 (I only give roughly rounded numbers of more detailed statistics).
7 These societies were not merely complex because they depended on a division of labor, they were also "civilized" in the pragmatic sense that they employed written records, developed literature, and generated urbanization.
8 Procopius, *History of the Wars* I, xx, 12 (trans. Dewing in the Loeb Classical Library); Bowersock 2013, ch. 8 for a recent discussion of this text.
9 Gruzinski 2012: 60.
10 Lucassen 2004: 15 (table 1, estimating app. 40,000 in 1687–1688); Chaudhuri 1985, ch. 4 (in particular 82–83); de Vries and van der Woude 1997: 382–396; Israel 1989, *passim*. Howell 2015 for an excellent discussion of the institutional innovation represented by the VOC from the perspective of the ancient historian and Indian Ocean trade.
11 Morley 1996 on Rome, parasitism, and economic development.
12 Byron *Childe Harrold's Pilgrimage,* Canto IV, 46, 414 (cited in the Oxford World's Classics edition of McGann); Tchernia 2011: 14–17 on the inordinate size of Rome and the catalogue of goods brought to Rome listed in the *Book of Revelation* (ch. 18, 11–16); the condemnation of Rome/Babylon as the great whore is contained in chs. 17–18.
13 Woolf 1990.
14 Braudel 1981–1984.
15 Harris 1979: 68–74 collects most of the literary sources and offers a basic discussion of Roman economic gains from conquest.
16 Plutarch, *Life of Aemilius Paulus,* ch. 32: 4–5.
17 Cicero, *De Imperio Gn. Pompeii Oratio (Speech on the Command of Gn. Pompeius)* ch. 7: 19. Temin 2013: 178–179 misreads this text as evidence of integration of freely operating credit markets in the Mediterranean rather than a phenomenon tied to the closed networks of Romans engaged in the exploitation of imperial provinces and taxation. Malmendier 2002 on the societies of tax farmers. Cottier et al. 2008 offer further perspectives on Roman tax farming. Under the emperors, the role of these publicans or companies of tax farmers was much reduced.
18 Mattingly 2011, ch. 7 for a basic discussion of Roman mining activity.
19 Lowe 2009: 70–79, 102–109 for a brief survey of Roman mining on the Iberian Peninsula. The fundamental monograph is Domergue 1990. The identification of lead isotopes from

Spanish mines during antiquity in the Greenland ice cap cores was made in a number of now famous and frequently quoted studies, e.g., Rosman et al. 1997. Penna 2014: 153–157 puts these findings in their world historical context.

20 On Roman taxation and extraction, I take guidance from the recent and up to date surveys of Tan 2015; Scheidel 2015; and Mattingly 2011: ch. 5, which all collect the basic evidence and provide extensive bibliographies. Hopkins 1980 estimated the share of the Roman state to be between 5 and 10 percent of the economy, more recent discussion by Lo Cascio 2007: 622–625. See Bang 2008: ch. 2 for an attempt to argue that this would, within the constraints of a preindustrial economy, still have been a very significant force of change in the Mediterranean.

21 Pliny, *Natural History*, 33, xvii, 56: *a quo tempore populus Romanus tributum pendere desiit* (my translation).

22 Bang 2013: 413–415, 419–423.

23 Wilson 2011: 188–190. A city is here understood to have a population of at least 5,000 people (a low bar, considering that Jan de Vries (1984) in his study of urbanization in premodern Europe used 10,000 as the minimum to qualify as a city). With the exception of Italy and the province of Achaia, the population tally is about 1,129,500. Given the margin of error in such very rough estimates, this more or less equals the size of what we believe Rome to have been. Some communities had urban legal status, although they fell below the demographic threshold of 5,000 inhabitants. But in this chapter, I am interested in the capacity of cities to function as central places, concentrating population and demand to serve as market centers. In economic terms, there would have been little to distinguish the tiniest formally urban community from a village.

24 Schiavone 2000: ch. 7. See further Kay 2014.

25 Tacitus *Agricola*, ch. 30: *ubi solitudinem faciunt, pacem appellant* (my translation).

26 A point argued in the final part of Bang 2012.

27 Garnsey 1988: ch.12; Erdkamp 2005: ch. 5.

28 Duncan-Jones 1994.

29 Hopkins 2001: 216. Hanson 2016 for a recent survey of Roman urbanism, showing it vitality, although perhaps tending to count a little too highly. For balance, see De Ligt 2016 on Roman Northern Italy.

30 Scheidel 2007: 74–86.

31 Bang 2007 for an attempt to rethink Roman imperial history in terms of protection costs.

32 Bang 2013: 442–445: one may even speculate that the share claimed by the imperial state declined during the first centuries of the imperial monarchy. For further discussion of the political economy of the Roman Empire, see Hopkins 2001 and 2009. See Monson 2012 for an argument that taxation was lowered in Egypt after the Roman conquest.

33 Garnsey and Saller 1987: 26–40 for an instructive discussion of urban government.

34 Further discussion of the Phoenicians and their westward extension of Near Eastern Civilization in Goody 2012: 67–78 and ch. 5 (in particular p. 93 describing Mediterranean antiquity as an "Iron Age prolongation of the culture of the ancient Near East) and Pietersee 2015.

35 An impression of the different positions may be gleaned from "A forum on trade," in Scheidel 2012.

36 Woolf 2012: 222–226 on the new types of consumption developing under Roman rule. Sommer 2015 locates this development within a wider civilizational expansion from the early Iron Ages onwards in the Mediterranean and beyond. Morley 2007: ch. 3 offers many observations relevant for the portrait of Roman consumption sketched in this section.

37 It is noticeable how much of Millar 1969, a study of the Roman spice trade, was based on information derived from ancient medicine (and magic).

38 Murphy 2004. Bang 2008, *epilegomena* and 2009: 117–120 and Pollard 2009 analyze the link between universal empire, a culture of consumption, and long-distance trade in the Roman world and in a comparative context.

39 These qualities were celebrated, e.g., in the circus arena, as demonstrated by Martial's little book on the spectacles (*liber de spectaculis)*. For an analysis of marvels and Pliny's *Natural History*, see Naas 2011. In the following (and preceding) analysis of the properties of goods and the ideologies of consumption I draw on inspiration from Bayly 2002 and his notion of archaic globalization.

40 Lucian, *Essays in Portraiture*, ch. 22 (trans. Harmon in Loeb). Vout 2007: 232 for the identification of Panthea with culture, although I have doubts about her attempt to read the whole text in the context of postcolonial oppositions and postmodern fragmentation and anxiety. The text is not an example of "local culture," as stated on p. 234, but is an expression of a cosmopolitan, imperial, and privileged discourse.

41 The locus classicus is, of course, the so-called Dinner of Trimalchio contained in the extant pages of Petronius's *Satyricon,* chs. 26–78, on which Veyne 1961 was groundbreaking. See Mouritsen 2011 for a recent analysis of freedmen and the social critique often directed at this group. But the satirical whip was not reserved for ex-slaves alone, see e.g. Horace, *Satires* II, 4 (on the obsessive gourmet) and II, 8 (on a deficient and snobbish dinner host). Anderson 1982: 41–49 remains excellent on the ineptitude of the main characters of these latter satires.

42 For the legislation that reserves the use of golden rings among Roman citizens to only those who qualified for membership of the two highest orders, knights and senators, see Pliny, *Natural History*, XXXIII, viii, 32. All of Book XXXIII, on precious metals, is a good example of how a steadily increasing scale and refinement can be charted for elite consumption in Roman society. Whether Pliny was completely accurate in reporting these historical developments is a minor issue, the general trend cannot be questioned.

43 Wallace-Hadrill 2008: ch. 7 on luxury (including Pliny) and ch. 8 on the waves of fashion and the types of goods, often of exquisite craftsmanship, prized by Roman civilization.

44 Elias 1997: 1: 157–394.

45 Woolf 1996 for an attempt to relate the cultural history of the empire to the sociology of "social configurations" formulated by Elias.

46 I am grateful to David Mattingly for having taught me this point long ago.

47 Catullus, Poem 12, 11–16 (*sudaria Saetaba*). Cicero *Epistulae ad Familiares* VIII, 2 (panthers for games in Rome). In this case, a great deal seems comparable to the early modern world of the sixteenth and early seventeenth centuries where collectors, inspired by works such as Pliny's *Natural History,* began to gather the exotic marvels brought back to Europe from the New World and other overseas locations, cf. several of the contributions to the volume on *Merchants and Marvels* edited by Smith and Findlen (2002).

48 Quotation from Scheidel 2013: 35.

49 *T. Vind.* 9, 4 (Bowman 1994: 69–70, 112–114); Seland 2010 for a measured monograph on the Indian Ocean trading system in the first century AD, including the availability of pepper in the Roman world. See further, Tomber 2008, Young 2001, and finally, Evers 2016 (which landed on my desk just as this text was submitted for publication), although perhaps slightly more "upbeat" in assessing the extent of the trade with the Indian Ocean than the present author. Sidebotham 2011 is a recent monograph, though with a tendency to inflate quantitative estimates, dedicated to the Red Sea harbor of Berenike, which was active in trade with the East during the Ptolemaic and Roman eras. De Romanis 2012 and 2015 for an attempt to reconstruct the amount of pepper carried by one particularly large Roman ship sailing from India to the Red Sea. However, the result, that the quantity could match that of the Portuguese ships in the sixteenth century, remains based purely on speculative, if fascinating, conjecture and cannot be made to support much weight. The number of "ifs" is far too large and the document too damaged to allow a solid reconstruction of the ship's cargo. Not even the word *pepper* survives.

50 Pollard 2013, an article rich and suggestive in ideas, hypothesizes that the presence of Eastern goods in magical recipes from Late Antique Egypt indicates that trade had declined and the goods had become rare and hence mystical. But even in the putative heyday of Eastern

commerce, Pliny the Elder (*Natural History*, XXIV, I, 4–5) would carp at the addition of rare Eastern substances to medical cures for their exotic, mystical effect. Moreover, pepper and other Eastern goods remained in sufficiently good supply for Alaric to demand 3,000 pounds of pepper in ransom for Rome (Millar 1969: 25), and for part of the yield of estates located in the eastern part of the empire along the entry routes of trade from the Orient, but donated by the emperors to the papal churches in Rome, to include a copious range and quantity of these goods, a clear sign of basic continuity (Seland 2012). Beagon 1992: 102–113 and 227–233 for a discussion of Pliny's misgivings about the close to inseparable character of magic and medicine in the Roman world.

51 See Morley 2007: 39–43 for a discussion of so-called luxuries and staples. Part of the significance of Israel 1989 was precisely to insist that low-bulk, high-value luxury trade was as important to the rise of Dutch commercial preponderance in the early modern world as the trade in bulky staples such as cod, timber, and grain.

52 See Rathbone 2000 on the so-called Muziris papyrus, from the second century AD, which documents a single cargo of goods from India, evaluated at several million sesterces on which customs dues had to be defrayed. For comparison, a Roman senator was expected to have a minimum fortune of one million sesterces. De Romanis 2006 for an ingenuous suggestion that an inscription found in one of the funeral towers outside of Palmyra contains a month's account of the collection of the 25 percent customs duty levied on eastern imports. If this reading is correct, the impression of substantial values involved in the trade with the East is not merely confirmed, but strengthened. Nevertheless, this remains speculative and uncertain, even if the inscription does in fact refer to the 25 percent custom's fees levied on eastern goods. The first editor of the inscription read something entirely different.

53 Mayer 2012; Pitts 2015; Scheidel and Friesen 2009; Wallace-Hadrill 1994.

54 Wickham 2005.

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NINETEEN

WORLD TRADE IN THE FIFTEENTH AND EARLY SIXTEENTH CENTURIES

Thomas Lindkvist and Janken Myrdal

INTRODUCTION: WINDS OF CHANGE

In December 1500, the Portuguese navigator Pedro Álvares Cabral ordered the bombardment of the south Indian city of Calicut from where his ships lay at anchor. The cause of the conflict lay in the different opinions of the parties involved as to how and in what forms the exchange of goods should proceed. Cabral also attacked Arab ships loading pepper, one of the most important products in long-distance trade at the time and one of the treasures that had drawn the Portuguese to the Indian Ocean.

The effort to control imports of pepper and other costly products was a driving force behind the transoceanic expansion initiated by the kingdoms of the Iberian Peninsula in the fifteenth century. The ability to sail across the seas and engage in the exchange of goods was part of the push to circumvent Venetian control of the exchange of goods between the Levant and Western Europe, which connected to the Muslim trade networks to the East.

About five years before Cabral, another Portuguese navigator, Vasco da Gama, "discovered" the sea route to India around the Cape of Good Hope. However, this claim does overlook the fact that this route seems to have been known earlier, but from the other direction. In the late fifteenth century, an Arab navigator, Ahmed Ibn Majid, described various sea routes in the Indian Ocean, including the possibility of sailing from the east around the Cape of Good Hope and along the west coast of Africa into the Mediterranean at Gibraltar.

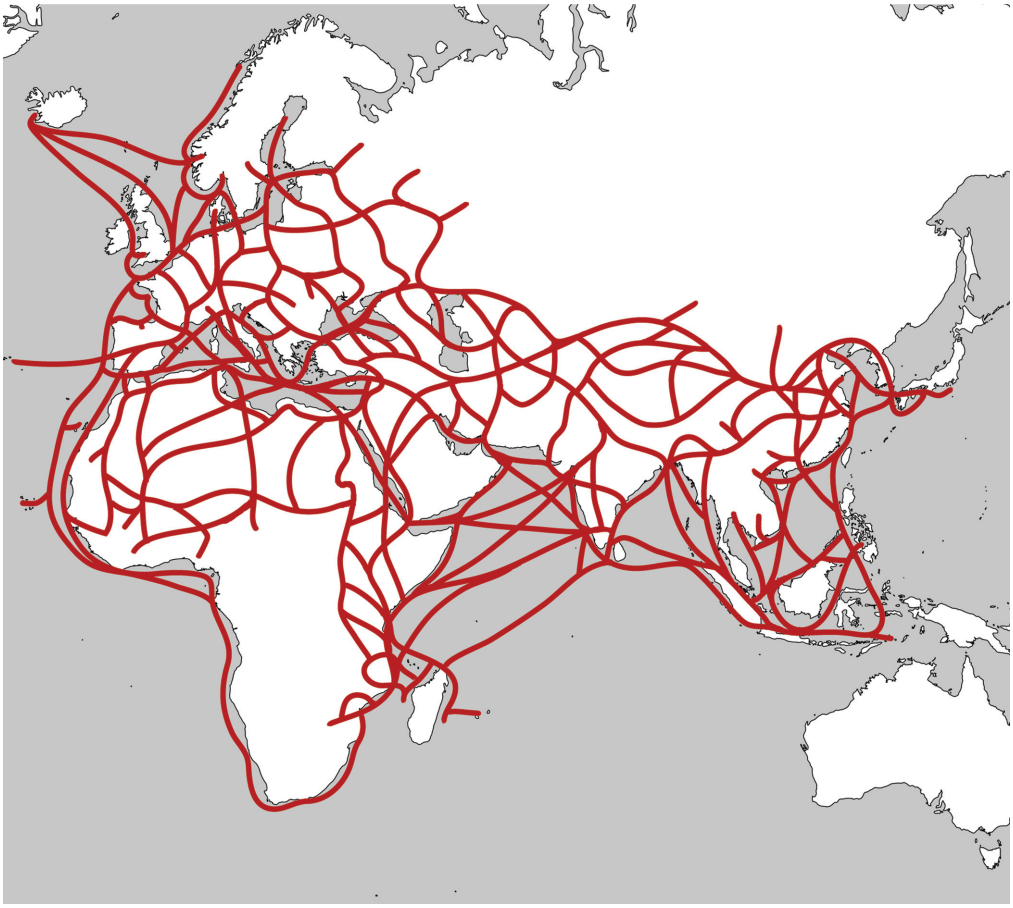
The route was thus known before Vasco da Gama, but there was apparently little interest in the east in sailing westwards (Abu-Lughod 1989: 251–260).

In this chapter, we will discuss how and why these events were part of a general change in the structure of world trade, and our main question relates to which stage the development of world trade was around 1500, the chronological terminus of this book. In the introduction, Kristian Kristiansen lines up the major trajectories with a focus on the beginning of long-distance trade over Eurasia in the Bronze Age. Interconnected networks have existed for millennia in the Old World and the New World, but there is also a change over time and long-distance trade has undergone various stages of development. It has even been argued that true world trade did not arise before commodity price convergence and the full integration of markets in the early nineteenth century (O'Rourke and Williamson 2002), but such a contention glosses over the incremental development of all phenomena.

In this chapter, trade rather than civilization is discussed, and we leave the Americas aside. However, one question that should be discussed is why regular contacts over the Atlantic were established so late. The hypothesis is that the inclusion at a higher and more intensive level of trade is simultaneously exclusionary. When the scope of demand rises, requirements are also articulated for infrastructure and for trade volume. For an area to be included, it must have marketplaces, a consuming upper class, and an increase in the production of export goods. In the Middle Ages, trade expanded, which also strengthened the orientation towards the center. Europe looked to the East, which was where the desired trading goods were found. America had been within reach for a long time.

In addition, a fundamental view in this chapter is that Europe did not explore Asia; instead, Europe was more neatly incorporated into an existing trade network. Economic reorganization and expansion, in many parts of Eurasia formed the basis for a new level of integration in long-distance trade. After 1500, this development gave Asia a new and expanding market for its products in Europe. In addition, the new crop plants that were spread from the New World came to benefit the production of export goods in Asia.

During the period discussed here, the Late Middle Ages, long-distance trade was dominated utterly by luxury goods. The luxury goods trade was controlled by elites in far-flung societies. These elites were also the market for such prestige goods: markers of social and political status whose key function was to establish and reproduce power. Luxury trade also meant an increasing consumption for pleasure, for instance, using spices to enhance the taste of food. Eventually products limited to the elite were later increasingly adopted and consumed by the masses. Colonial goods such as sugar and tobacco have undergone such a transition, which gave long-distance trade a totally new dimension from the early modern period onwards.



19.1. Long-distance trade routes in the fifteenth century in Afro-Eurasia, see appendix.

Trading in staples and bulky goods was not unimportant in relation to long-distance trade. It took place primarily within various cultural arenas and circular trading spheres in, for example, China or the Western Christian world. Commodities, such as foodstuffs and utilitarian fabrics, could be shipped over relatively long distances inside the trading spheres, provisioning imperial capital cities or centers of commerce and industry. An increased production and trading with commodities enriched the elite, and thus formed a part of the basis for an expanding long-distance trade in luxury goods.

By necessity, an overarching survey gives a general overview, mainly using what we label *tertiary sources*. For instance, we have tried to make a more complete mapping of the African-Eurasian trade than has usually been done before. A map is an analytical tool, and its underlying data should be discussed. In an appendix, we explain what we mean by tertiary sources and give the data we have used for the map (Figure 19.1).

Basically, the map shows the dense trade network over Eurasia in the fifteenth century, where trade could always take new routes if some were blocked by war or rulers. Traders could always find new ways to get through when one trade route or another was closed for some time, and thus, not all the routes were of the same importance simultaneously. This map provides an overview of the dense, but not yet strictly controlled network in the fifteenth century.

THE NETWORK AROUND 1000

In most of Eurasia and Northern Africa, the period from around 800 to 1200 forms an era of expanding economy and population increase that eventually led to a new level of long-distance trade. Janet Abu-Lughod argued in her book from 1989 that a confluence of trading systems had occurred before and around the thirteenth century. This trade was not dominated by a single power, but was instead a network, primarily among important cities.

Long-distance world trade forced a certain degree of commensurability among social, political, and economic organizations into existence in the various interacting cultures. The network could be subject to disruptions that caused shortages in various luxury goods, for instance, because of plundering and the taking of tributes. This activity forced a higher degree of organization and planning to establish secure long-distance trade. However, trade was able to continue even under more politically fragmented conditions due to the deft management of numerous petty merchants (Beckwith 2009: 256).

Overland transport was substantial. The dromedary was the means of transport in the Sahara, and the Bactrian camel in Central Asia. A caravan of 5,000–6,000 Bactrian camels could carry as much as a large sailing ship, with one difference being that the caravan could not transport bulky goods (Braudel 1994: 62; Bulliet 1990). Caravan routes linked discrete trading spheres. The Silk Road through Central Asia, made up of numerous tracks and routes, created cities like Samarkand and Bukhara where merchants from the east and west met. Control over the exchange of goods and caravan routes through the Sahara likewise laid the foundations for kingdoms such as Mali and Songhay, where a city like Timbuktu was a cultural and economic center.

On the routes that stretched across the vast deserts or steppes, nomads were often the brokers of goods and protectors of the routes, although people from the cities were normally the actual merchants. The nomads sometimes posed a military threat to farming communities and were, in other cases, a military power in their own right, but also played a key role in transport, and supplied the cities with goods derived from cattle herding. These nomadic communities were a mobile and warlike culture, and the need to uphold the existing social structure and, especially importantly, to reward other warriors meant that organization of the exchange of costly products, the taking of tributes in other

areas, and plundering were central aspects of these socioeconomic systems (Honeychurch 2015; Khazanov 1994: 209–211; 2001: 3; Veit 2009: 173–174). Their influence culminated under Mongolian rule. After the initial violent phase of military conquest and destruction, all overland trade became subject to Mongolian hegemony for a long time, albeit divided among different khanates. The Pax Mongolica brought significant stability to the exchange system along parts of the Silk Road from China to the Mediterranean, and trade flourished in the early fourteenth century (Bira 1996: 259–263; Biran 2009: 62; Morgan 2007: 72). The gradual emergence of transoceanic trading in the Late Middle Ages and the sixteenth century did not entail an immediate decline for the great land routes, but rather a reshuffling of trade goods, such as a decline for spices but an upturn for skins (Martinez 1999: 106–107; and about salt trade in the seventeenth century, see Perdue 2005: 106–107).

The large inland trading spheres in China and South Asia formed an important part of the inland trade there. (Domestic trade in China ca. 500–1000 Blunden and Elvin 1998: 122–123, trade products in South Asia 500–800 Habib and Habib 2012: 106–110, map 12. China and South Asia in the late medieval period see appendix.) The roads from China to India went across Yunnan from southwestern India, over Burma, and into northeastern India, and constituted important parts of the network that sprang forth over Eurasia (Cederlöf 2014; Leach 1954: 38; Lieberman 2003: 15).

Seafaring gradually came to play a more important role relative to land transport, due to a general increase in volumes. At first, sea voyages were generally undertaken along the coasts. This is especially important in Europe with its fragmented coastline. It made the Mediterranean a significant communications route, along with the Baltic and the North Seas. However, these seafaring regions were not linked with circumnavigation of the Iberian Peninsula until the fourteenth century (Pounds 1973: 402–425; 1974: 341–373). In the East, trade had followed the coast from the Persian Gulf and onwards to India since ancient times. It proceeded along the coast of India, while in Southeast Asia it was not until the beginning of the Common Era that the Strait of Malacca was circumnavigated, and the trade over the isthmus on the Malay Peninsula, the Isthmus of Kra, continued to play a role in trade for many centuries until its importance ended after the eleventh century (Hall 1992: 192; Stargardt 1998).

The Indian Ocean with its regularly reversing monsoon winds was the largest sea that navigators sailed for trading purposes; the winds changed direction with a relative certainty for the merchants to be able to return after a year. Navigators began to increasingly exploit these monsoon winds around the beginning of the Common Area, which also saw the rise of an Afro-Eurasian system with India in the center. Traversing the Indian Ocean and a growing amount of trade along the east coast of Africa also gradually made the Red Sea a more important trade route. The Muslim expansion was significant,

and no power had control over the entire trading system that stretched across the Indian Ocean, but Arabic merchants played a leading role that eventually extended to Southeast Asia in the Late Middle Ages (Beaujard 2012, and in this volume Beaujard and Kusimba, also Qin 2014: 87, 94).

Before 1500, trade was managed largely by relatively independent organizations. These often built-up networks with local populations and other merchants from the same nation, which was made easier because the merchants often resided for many months at a time in the ports from which they exported their goods, kept there by monsoon winds or other weather conditions, such as icing in the northern ports (see Gaimster in this volume). Cities such as Venice, Genoa, and Pisa in Italy or Kilwa, Sofala, and Mogadishu on the East African coast were often nodes for the exchange of goods. Similar mostly politically independent cities occasionally were part of larger organizations, such as the Hansa League in northern Europe. Kings and princes were rarely directly involved in trade. This changed in the sixteenth century as states became more centralized. The absolutist states in Europe began attempting to control trade in an entirely new way than before. State-supported, but also regulated and controlled, trade grew stronger than trade based on local centers of power. The same evolution occurred in Asia, primarily in the Muslim states (see Oka in this volume).

From the late thirteenth and during the fourteenth century, nearly the whole of Eurasia experienced a population decrease. We will not delve upon the causes, but they were multifaceted: wars, the plague, and climate change. A recovery, which went over into expansion, followed in the fifteenth and sixteenth centuries, especially in China and Europe. The Muslim countries instead experienced a long period of stagnation, which lasted until the nineteenth century (McEvedy and Jones 1978: 133–156, 219–229, causes for the stagnation discussed in Dols 1977: 218–234; Christensen 1993). In this chapter, we only note that trade may have declined for a shorter period in much of Eurasia, but this led to a disruption of trade in only in few areas (e.g., Iceland) and then only temporarily.

THE LATE MEDIEVAL EXPANSION

With first volume of *The Modern World-System*, Immanuel Wallerstein (1974) set the agenda for research on large systems. Wallerstein proceeds from the notion that the world has been organized in a system since the sixteenth century under European leadership: a *European world economy*. He concentrates on analyzing Europe, where the core of the system was found, while other parts of the world were peripheral or not yet integrated. Wallerstein contends that trading with commodities was of crucial significance and lead to the integration of Europe from the end of the fifteenth and throughout the sixteenth

century, and then was associated with a strengthening of state powers in the core area.

As mentioned, Janet Abu-Lughod has argued against this interpretation as there were several world systems in which Europe became involved. She also claimed that the networks were weakened in the Late Middle Ages, by the strain of economic crisis, and the European takeover was made possible in part by the weakening of the previously dominant position of Muslim trade. In fact, the late medieval period saw an upsurge in world trade and with more than one core area.

Beginning with China, just as in Europe, there was a massive development of the internal market during the Late Middle Ages; commodities trading was established. Agriculture was more directed towards commercial production. In his study of the Yangzi Delta (1990), Philip Huang has shown an agricultural intensification with a switch to labor-intensive commercial crops, such as cotton and mulberries (for silk) after the establishment of the Ming Dynasty, concurrent to the European Late Middle Ages and the Renaissance (Huang 1990: 14). In a 1998 study of the coastal regions of southern China, Robert Marks has shown the same tendency towards the commercialization of agriculture during the period of 1550–1640: Silk and sugar were cultivated and rice began to be imported to the region (Marks 1998: 119). This finding is also in agreement with scholars who have argued that China was in a state of economic parity with Europe (see Pomeranz 2000).

Southeast Asia was established as a global trading hub by virtue of both its geographical location and the emergent production of luxury goods, primarily spices, together with a late medieval expansion (Lieberman 2003: 254–258; Reid 1988–1993, 1992, see also appendix). In the forest areas in South East Asia, swidden agriculture became more dynamic and efficient with the cultivation of sweet potatoes, maize, and other new crop plants. This production promoted population growth, and one source of income was indeed the production of high-value goods, such as pepper, for the lowlands and for an international market (Scott 2009: 197–198). Typical for the medieval trading structure around the Strait of Malacca were the thalassocracies, realms based on the exchange of goods and brokering of transoceanic trade, but they always had an agrarian hinterland. The city-state of Srivijaya centered on Sumatra (eighth–eleventh century) is one example. These realms were dependent upon provisions from areas with surplus food production. The rice-producing Java came to play an increasingly important role: Majapahit in the eastern part of the island, for example, which dominated the growing trade in the region from the thirteenth to the fifteenth century (Hall 1985, 2011).

Furthermore, in Southwest India the gradual growth in regional trade in the fifteenth and sixteenth centuries was followed by a transition to the production of luxury goods for an international market, primarily spices like pepper and

cardamom. Upland peoples cultivated crops for export, as they could depend upon an increasing level of rice production in the lowlands for their own subsistence. This expansion began well before the arrival of the Portuguese and accelerated rapidly once the European market was opened (Morrison 2002). Indian exports were highly differentiated and included a wide variety of goods (see map in Schwartzberg 1978: pl.VI.B.2.). There was a similar development in the Philippines (Junker 2002 and in this volume).

With respect to the Indian Ocean, there is Beaujard's magnum opus of 2012 (see also his chapter in this volume). For the period we are interested in here, he points to the Chinese recovery as a prime engine in the world system of trade in the Late Middle Ages. The focus of his presentation is Madagascar, and he shows how an expansion occurs in the Late Middle Ages there as well, with an increase in the production of foodstuffs alongside increased production for export, and how the large island is networked with other regions surrounding the ocean territories of South Asia (Beaujard 2012: 1: 369). There are equivalents in Africa, which developed along with the increased trade across the Sahara in which the caravans took the place of ships, and in East Africa along the coast, as argued by Kusimba (in this volume).

For Central Asia, Susan Whitfield shows that trade over the vast land territories is constant between merchants, even within small political entities (Whitfield 1999 and in this volume). In addition, the land-based Islamic empires were profoundly important to the development of trade during the late fifteenth and sixteenth centuries (see Oka this volume).

This transformation from the Late Middle Ages was profound, and the European expansion may be seen as one element of this massive growth of world economic integration. This development is comprised of numerous small subsystems of independent trade cities or small trade states. Trade in luxury goods was based on expanding commodities trading within several large regions in Eurasia. The European contribution was their takeover of part of this trade and the opening of a burgeoning market – the European – by means of direct trade.

Our interpretation is in line with what Fernand Braudel already suggested. One theme Braudel identified points to the importance of spices, not only in Europe, but also in Asia during the Middle Ages. He emphasizes that by the Late Middle Ages – before the arrival of the Europeans – the three major trading systems, the Muslim, the Indian, and the Chinese, were intertwined, while the European was yet only indirectly linked through the Muslim system. Along with the recovery in China, the Strait of Malacca and its cities took on a central importance in the fifteenth century (Braudel 1981–1984: 3 passim). After the year 1500, there was a rapid increase in imports to Europe in the sixteenth century (Braudel 1981–1984: 1: 160, 1: 195–196, 1: 231, 2: 377). This

expansion was now increasingly dominated by European powers, initially by the Portuguese but gradually more so by the Dutch.

The European expansion instead consisted of utilizing already known trade routes in a new way. Felipe Fernández-Armesto has described events in the late fifteenth century as a European "maritime turn" (Fernández-Armesto 2006: 109–151) led by the Portuguese. While the Portuguese prince known as Henry the Navigator was more interested in seafaring in theory than in practice, the development of navigational techniques was advanced by the school of navigators he is said to have founded in Sagres. The Portuguese sailed ever further out from the continental land masses, attempting to find better routes to eastern Asia and surround the Muslim territories. Trade was not the only driving force; this development was also an expansion of the ideology of the crusades, combined with plundering and slave hunting (Abulafia 2008; Fernández-Armesto 1991; Herbers 2011). And they were by no means alone in this maritime expansion. Significant naval expeditions led by Zheng He were undertaken from China in the early fifteenth century around the Indian Ocean, but their overriding purpose was the manifestation of power and the taking of tributes. These Chinese voyages were not intended to create an empire or establish trade, and they followed well-known and established routes. The expeditions ceased after the death of the Yongle emperor, and the Chinese concentrated on defending their land borders, a development that occurred at roughly the same time as the Portuguese began to sail water hitherto unknown to them (Dreyer 2006; Levathes 1994).

Instead of focusing on one center, Europe, this interpretation considers a multicentered world with several dynamic large regions, and thus, basic underlying features must be discussed. We will only give a sketch, which is more an invitation to further research than a fully implemented interpretation.

AN INTERPRETATION OF THE LATE MEDIEVAL CHANGE

All of Eurasia (and at least North Africa) was hit by a significant crisis in the fourteenth century. Plague and war led to population declines and economic stagnation. The resulting diminished population and production also had an adverse impact on long-distance trade, although it did not come to a halt by any stretch of the imagination.

A recovery followed in the fifteenth century, first in China and subsequently in Europe and India. Populations and production increased. This recovery occurred at a higher level in the sense that production was more efficient and thus provided scope for a greater social and regional division of labor. This division then led to ever-increasing geographical division of labor within these larger regions, in Europe as well as in China and India.

In turn, this more extensive geographical division of labor came to be a main element of the socioeconomic development that dominated Eurasia in the sixteenth and seventeenth centuries. Large regions – all of Europe, China, and large parts of South Asia, and presumably also other large regions – were joined by commodities trading. This increased bulk trade created conditions for further development of centers of industry, such as the Netherlands or the South Chinese coast. The increased regional division of labor, caused by increased labor productivity, also provided greater opportunity to produce surpluses. Greater wealth could be accumulated in groups that requested luxury goods. The increase in the consumption of luxury goods, both within the elite classes and to a certain extent within the middle class, thus encompassed not only consumption of goods within one's own large region but also a greater demand for goods imported from far away. Consequently, this trend brought about an increase in long-distance Afro-Eurasian trade.

The increase in long-distance trade was linked to changing conditions. For instance, technology and the organization of trade both changed. The transition to the sea route has been given particular attention due to the role the Europeans came to play in maritime shipping. A geographical organization of trade meant that trade was incorporated into the progressively stronger states taking shape across Eurasia. European trade then had to either submit or to destabilize and establish vassal states, as did the aforementioned Pedro Álvares Cabral.

This sketch depicts a dialectical movement, where a crisis shapes the prerequisites for a new expansion on a higher level (for regional examples connection to this theory see Bois 1984; Myrdal 2011, and in general about the role of crises, see Tainter 1987). Expanding trade and an increasingly extensive and dense network also had another effect. The focus was turned to the core areas. According to the medieval Europeans, the Holy Land and Jerusalem were the center of the world, which is evident from the medieval maps known as "T-maps" (Brotton 2012: 82–113). Europe was instead regarded as a periphery in the northwestern corner. The Atlantic Ocean in the west was the outer border of the world and, therefore, of no substantial interest in terms of exploration. Europe was looking to the east, with its back to the west.

WHY NOT AMERICA?

The transformations in the world around 1500 are often associated with the so-called discovery of America. The attempts to find a sea route from the Iberian Peninsula to India, culminating in Columbus landing on Guanahani in the Bahamas, are the reason that the year 1492 has been ascribed such significance in world history.

Why was the transatlantic route from Europe to the Americas not discovered earlier? The Atlantic was difficult, but not impossible, to cross. Nordic peoples had been voyaging in the North Atlantic since about 800 in their long, but shallow-drafted ships. The Faeroe Islands and Iceland were colonized and, from Iceland, settlements were established on Greenland and for a brief period even on Newfoundland. However, these Europeans' discovery of the Americas only had a marginal impact. This lack of influence depended on the fact that the principal aim of these voyages was not to open new trade routes. They were instead undertaken to establish new settlements and communities, preferably in previously uninhabited areas. The Norse in particular avoided contact with the native people they met. The conflict between the Norse settlers and the Inuit population strongly contributed to the final extinction of the tiny settlement on Greenland (Arneborg 2008; Sutherland 2008).

Fishermen from Europe, the Basques in particular, took advantage of the vast and rich fishing waters off the banks of the shores of Newfoundland. They occasionally landed there, mostly for provision but without any intent of settling or to establish contact with the indigenous population (Kurlansky 1999: 56–64). They used natural resources on the other side of the Atlantic, but their market was on their homeland continent. The Europeans, be they Norse, Basques, or others, never met societies where it was possible to establish more substantial relations in terms of the exchange of products. These societies lacked the mutual interests of exchange. In addition, their levels of social and economic organization were not commensurable.

While Atlantic connections were included and became the essential component of the emergence of the world system after 1500, a territory such as Oceania came to be excluded, but much earlier and perhaps for partly other reasons (see Spriggs this volume).

A possible interpretation is: Inclusion at a higher and more intense level is simultaneously excluding. With rising demand, increasing pressure is placed on infrastructure and trade volume. For an area to be included, it must have marketplaces, a consuming upper class, and an increase in the production of export goods. The great expansion of trade during the Middle Ages in Afro-Eurasia strengthened the orientation towards the center. Europe looked to the east, which was where the desired trading goods were found and the preferred destination of merchants who were intent on long-distance trade. Thus, the problem was not a lack of possibility, but a lack of interest. It is symptomatic that the route there was discovered in an attempt to reach the east. Once the Americas and their riches were discovered, an inclusion certainly occurred, although not through trade, as in Asia, but by direct conquest.

The same development probably also applies east of Eurasia. The increasingly intensive trade in the Philippines and Indonesia meant that the areas that were at a less intensive level of economic development ended up outside of the

sphere of interest. There were also other parts of the world that were excluded entirely, such as Australia. Unlike the coasts of the Indian Ocean or along the trade route to China and the Silk Road, the conditions in these other areas did not exist for a more regular exchange of goods. Societies could not forge links with each other. They were not sufficiently hierarchical; there was often no state power with an elite that had a need for the exchange of luxury goods and no social structure that could produce large quantities of goods for trade.

SUMMARY

Long-distance world trade contributed to a certain degree of commensurability of social, political, and economic organization among the various and interacting cultures. A trade route as long as the Silk Road could be subjected to disruptions in such a way that shortages of various luxury goods were caused by plundering and the taking of tributes. These factors forced a higher degree of organization and planning to secure long-distance trade, although trade was able to continue even under more politically fragmented conditions under the deft management of numerous petty merchants.

What happened then around 1500? It was not the Europeans that discovered the world. But Europe, or rather Western Europe, became more integrated into the global trade system and was increasingly a market for Asian products. Behind the European expansion from the late fifteenth century was an internal European competition of access to precious Asian products. It led, at first, the Portuguese, followed later by other nationalities, to explore new, maritime routes to India.

A worldwide economic expansion in the High Middle Ages in the centuries around the year 1000 was a prerequisite for the continuous expansion of trade throughout Eurasia and North Africa. According to our hypothesis, this expansion also implied an increasing focus on the core regions, where the amalgamation of the trade networks also tended to exclude thrusts over the Atlantic and Pacific Oceans.

There were many trade roads before 1500. None of them was monopolized by one single political power with the exception of the Mongolian control of the Silk Road during the thirteenth century. The land routes gravitating towards the center of the Eurasian continent were the most important. After 1500, the sea routes gained in importance, which heavily facilitated the transport of larger quantities of products. The inland routes declined and gradually faded away. The new sea routes were dominated by European powers and they opened new areas in, notably, America for inclusion, although not by trade, but by military conquest and colonization.

During the Late Middle Ages, basically after the Black Death, the regional division of labor was developed in the core regions of Eurasia, in the west

(Europe), in the south and in the east. This change formed the basis for increased trade with staples in these larger regions, and led to a sharp increase in global trade with luxury products. According to this perspective, the European trade expansion in the sixteenth century may also be seen as a more direct inclusion of the growing European market into a global trade system.

The map we have made (Figure 19.1) helps to explain why trade turned increasingly inward. In a process of path dependence, the network attracted more trade, and both the eastern and the western periphery turned towards the center, rather than expanding in the other direction. If the whole network is seen as a continuum, this development does not imply that the change around 1500 was the inclusion of Europe, or even less a European conquest. Instead, the European market came closer to the Asian producers with a maritime and more direct trade route.

The emerging, centralized absolutist states in Europe from the late fifteenth century and onwards became more interested in controlling long-distance trade. They also acquired the financial, administrative, and military means to exercise and partly monopolize that control. On the political level, this order of strong European states replaced the pre-1500 system with its great variety of polities organizing trade like regional thalassocracies, independent cities, or leagues of cities.

APPENDIX: CONSTRUCTING A MAP OVER TRADE ROUTES IN THE FIFTEENTH CENTURY

The intent of the map (Figure 19.1) is to show the dense networks of trade routes over the central parts of Afro-Eurasia. Each line represents a number of roads following the same major route. The map does not describe trade at a given time, for example, the year 1500. Instead, all important trade routes in use during the fifteenth century have been included, but they were not all in use simultaneously. If a route was blocked by wars, hostile states, pirates, and so forth trade could flow along other routes.

It covers a long fifteenth century, as some of the maps it is based on cover a somewhat longer period than just the fifteenth century. Maps with a focus on earlier or later periods have been excluded. Lumping maps together that cover too long of a period would hide change over time. The map extends to when the Portuguese rounded Africa, but trade routes to the Americas had not yet been established. Certainly Columbus sailed four years before Vasco da Gama, but while the Portuguese immediately established trade connections, it took several decades until the Spaniards had established regular trade with the Americas.

A scholar working on world history has to utilize secondary and tertiary sources. While secondary sources are based on primary sources, tertiary sources

are based on secondary sources, and in relation to world history surveys, scholarly literature has to be regarded as a source material because it is normally not possible to access the primary sources (Myrdal 2016). The tertiary sources used are mainly historical atlases. Political conditions form the basis of all historical atlases, but trade is quite often mapped as a spatial movement.

Two kinds of trade maps have been used: general maps of Eurasia, and specific maps of a region such as Southeast Asia. Only scholarly maps developed by experts have been taken into account as a base for the maps presented here. Historical atlases seldom give information about the sources they have used. Exceptions exist, such as the *Erläuterung* to *The Grosser Historischer Weltatlas* (for medieval trade, see Johansen and Weczerka 1983 and Kellenbenz 1983 commenting Engel 1979: 2: 85–86).

For general maps, we have excluded those more than twenty years old, because modern maps have less of a Eurocentric perspective (Black 1997: 200). For regional maps, a number of older maps of high quality exists, such as Needham's maps for China or the Icelandic historical atlas showing trade across the North Atlantic. General maps over trade routes in Eurasia and Africa are selective, mainly highlighting a few trade routes and hiding the actual, dense network. Regional maps are crucial, but a source critical problem for regional maps is that some regions are more extensively researched, such as Europe and China, and thus a more strict selection of what to include in our map has been made for those regions. Atlases for smaller regions, as most national atlases, have been excluded.

Relative importance does not appear that separating the most important of these trade routes from those of medium importance has not been possible. A presentation of the relative importance of trade routes would demand a study of secondary and primary sources. Toby Wilkinson has developed a method that combines archaeological data with later sources such as caravanserais and British military maps from the nineteenth century (Wilkinson 2014). Shipwrecks and travel accounts are other important sources. The trade routes are marked with fairly thick lines, as they were clusters of adjacent roads, and presumably even more major trade routes existed. The interior of Africa and outer Siberia is not included. Influences and commodities also reached these regions, but trade was not of a magnitude that it would be shown on the maps on which ours are based.

Trade was in constant flux, and if we had made maps covering earlier or later periods, they would have been different. A map of trade in the thirteenth century would show a similar pattern of dense networks as in our map, but for example, roads to the Mongolian capital of Karakorum would also have been included. In the first half of the sixteenth century, further changes followed, such as Goa replacing Calicut as the main port on India's west coast. The Europeans were far from dominant then, but gradually a new pattern emerged. A map of

the seventeenth century would probably show that the amount of major trade routes tended to become fewer at the same time as trade volumes increased.

The following maps have been consulted:

Abazov 2008: map 21, the region from Taklimakan to Caspian Sea in the Middle Ages.
Atlas zur Geschichte 1973: 1, 36–37, Europe in the fourteenth and fifteenth century, trade routes and trade products.
Beaujard 2012: 2, map 5:3, South and West Asia in the fifteenth century; map 5:5, East Africa in the fifteenth and early sixteenth century.
Black 1999: 230, Indian Ocean in the fifteenth and sixteenth centuries, trade routes and trade products.
Bregel 2003: map 33, caravan routes around the Aral Sea.
Brice 1981: 10–112, the Muslim World 1300 and 1500.
Cederlöf 2014: 84–85, trade routes between Northeastern India and Yunnan thirteenth to sixteenth centuries.
Collcutt, Jansen and Kumakura 1991: 109, medieval trade Japan and China.
Cribb 2000: 89, Indonesia ca. 1500, trade routes and trade products.
Danzer 2000: 59, world trade routes 1100–1500.
Engel 1979: 86–87, Europe 1450 and 1500, with trade products for 1500.
Freeman-Grenville 1993: 84–85, Indian Ocean ca. 1498.
Habib 1982: map 0B and regional maps, trade and trade products in the Mughal Empire.
Hall 2011: 315, eastern Southeast Asia, including the Philippines.
Haywood 2011: 108–109, Afro-Eurasia ca. 1400.
Honeychurch 2015: 51, Central Asia trade routes compared with seasonal nomadic routes.
Johnson 1995: 134, South Asia in the Early Modern period, trade routes and trade products.
Júlíusson et al. 1989: 131, North Atlantic.
Kinder and Hilgemann 1964: 1: 182–183, Northern and Southeastern Europe, trade routes and trade products.
McEvedy 1992: 103, Europe ca. 1483, trade routes and trade products.
Needham 1971: foldout map to page 1, imperial roads in China.
Nicolle 2004: 148–149 (North Africa), 150 (East Africa), 157 (western part of North Africa), twelfth to fourteenth centuries.
Onians 2004: 139, China's global contacts, 1300–1500.
Ryavec 2015: 111–112, Tibet.
Schwartzberg 1978: 50–51, 208–209, South Asia, Early Modern period, trade routes and trade products.
Whitfield 1999: xii–xiii, Central Asia, including Tibet.
Whitfield 2004: 8 the Silk Road.
Wilkinson 2014: 68–69, caravanserais in West and Central Asia.

An interesting attempt in a textbook to describe different the world trade with specific trade -products is McKay et al. 2015: 186 (silk seventh century), 352 (spices 100 BCE–1500 CE), 778 (indigo around 1500), and other products such as silver and ceramics. This attempt highlights the fact, which has often been noted, that the Silk Road is a label for long-distance trade with many luxury products other than silk.

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TWENTY

POSTSCRIPT: GETTING THE GOODS FOR CIVILIZATION

Jonathan Friedman

The issue of trade and civilization in the most general sense has been the center of debates in economics, economic history, and anthropology for at least a century. The issues have varied, but there has been a *longue durée* of opposition between what might be called productionist versus external exchange perspectives, from the original primitivist-modernist debate concerning Classical Greece, to the substantivist-formalist debate in economic anthropology, to the onslaught by Adams (1974) on the substantivist bastion concerning the heartland of ancient Mesopotamia and, more recently, to the debates involving Algaze (2005, 2008), Frank and Gills, and Chase-Dunn and Hall (1991), Stein (1999), and others. The argument concerns the concrete nature of both precivilized and civilized political economies. The substantivist position was basically evolutionistic, positing a number of political economic types preceding industrial capitalism. While this evolutionism has been greatly modified, it exists in more sophisticated forms in the world-systems perspective in the work of Wallerstein (1991a, 2004) and, to some extent, in the work of Chase-Dunn and Hall and others. The core of the issue concerns the role of exchange, trade, and commerce in the process of economic growth and complexification. The questions can be divided into two broad areas. The first concerns the general issue of external exchange in the constitution of political units and social orders. The second involves the more well-known issue of the role of exchange in the development and expansion

of so-called civilizations. The chapters in this anthology address all of these issues in a variety of ways.

EXTERNAL EXCHANGE AND THE CONSTITUTION OF THE SOCIAL ORDER

The first, and one of the most basic issues for a volume such as this, is the role of external exchange in the formation of any social order. Was there a time of social isolates that subsequently evolved into complex regional systems? Aside from the issue of scale, it might well be argued that external relations are foundational to the very constitution of the social order. This can best be illuminated in the work of Lévi-Strauss (1967, 1973), who is not often associated with the question of trade and civilization. His discussion of the "elementary" structures of kinship, however, is an important statement on the question of external relations and internal order. His atom of kinship contrasted with a notion that the basic kin unit was the nuclear family by introducing the pivotal importance of the mother's brother. The alliance relationship established through exogamy, not as a reflex of the incest taboo, but as a positive expression of the centrality of external exchange of both people and of goods, redefined the local group as part of a wider system of exchanges. While the systemic implications of Lévi-Strauss's argument (1967) have been very much ignored, it has become increasingly evident that vast networks of exchange are not a product of the emergence of state-based civilizations but were rather one of its preconditions.

The fundamental structure of kinship-based social orders contains two axes. A horizontal structure of exchange in which any political unit is dependent on other units for its own social reproduction. This is, in reduced form, the basic argument of structuralism. The other is the vertical axis, the dependency of such units on a higher order of divine power in which life, wealth, and prestige are defined in terms of nearness to the ancestors and, thus, the gods who are a mere extension of the former. The articulation of these two axes is instrumental in the constitution of hierarchical political forms, containing as it does the basic properties of such forms whether they are realized in political reality. In the world before, and in the periphery of, the large-scale imperial orders called civilization, these social orders are widespread and dominant and have a transformational history of their own. The role of trade or exchange in such worlds is already critical, primarily in the definition and even formation of status differentiation.

Foreign objects were always the expression of and often the means to hierarchization. In this latter case, it is often a question of the widespread phenomena referred to as prestige goods systems about which a great deal has been written. The relation between prestige goods and kinship was established

by Kajsa Ekholm Friedman in her work on the Kongo Kingdom of Central Africa (1972, 1977). From the perspective of global systems, the relationship between internal and external is a chimera because the entire issue of the constitution of the local political unit is always part of the larger set of relations within which the local is reproduced. This does not mean that the local is a secondary phenomenon because, besides being the site of a specific dynamic of accumulation, exchange and political order, it harbors the entire framework of identification and existential conditions of sociality. Thus, the local is always articulated as a larger set of relations of social reproduction.

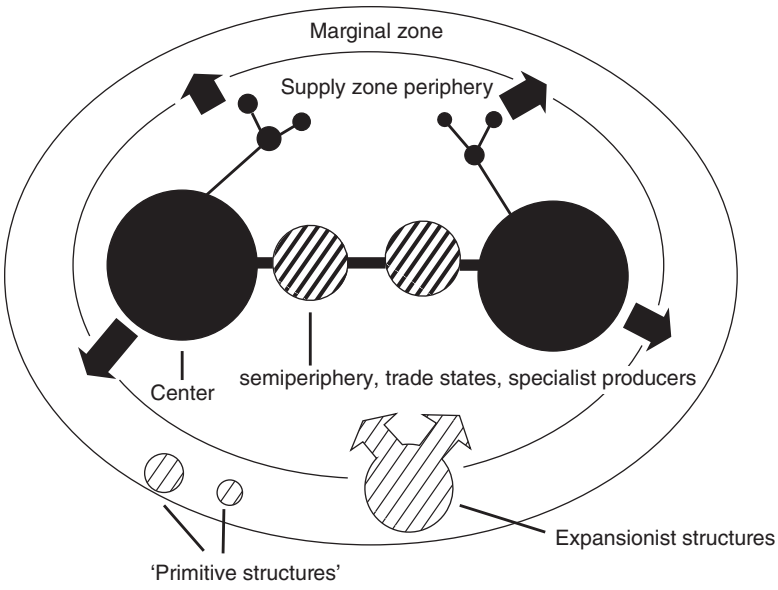
It is this notion of reproduction that has been stressed as the theoretical foundation for understanding the nature of the global in the most general terms. The issue raised in this volume by Earle concerning the lack of necessity of trade in the formation of civilization is justifiable but, of course, does not address the distinction between social hierarchy and stratification, and the relation of the latter to large-scale imperial domains. These are the spheres that fit the concept of civilization. The presence or absence of trade is not the central issue but, instead, the existence of imperialism as such. If trade is replaced by exchange or even transaction, there is no real problem. It is the formation of a political economic centrality within a larger socioeconomic field that is the important issue. However, as has been argued previously, the transformation that gives rise to such centrality entails the profound transformation of exchange through the decentralization and privatization of the accumulation of liquid wealth, the transition from the exchange of prestige goods to commercial relations, the emergence of merchants and a merchant class, and the change in the nature of economic calculation.

My own work on hierarchization among the Kachin (Friedman 1975, 1979) is very much based on a closed local model in which long-distance relations, at least, are not instrumental. Later, I criticized the model by proposing the relocation of groups, such as the Kachin, in a specific zone within a larger field of power. The Kachin did occupy a particular zone within the arena dominated by lowland civilizations, even if they were not subservient to the larger central states. In this perspective, hierarchization and, even, state formation are not necessarily based on long-distance exchange, although the latter usually becomes part of it. In addition, external relations are, of course, crucial in the hierarchization process, even if they are not long-distance trade relations. If prestige-goods systems represent a major pathway to hierarchy then it can be argued that long-distance relations do play a critical role in such developments. In any case, as has been stressed, civilization as a complex and large-scale imperial field of social and economic differentiation logically implies the kinds of large-scale regional relationships that are addressed in the main arguments of this book. In fact, it might be maintained that the Kachin, as I interpret them, represent a particular set of conditions within a larger system in which

so-called prestige-goods systems are another and quite prevalent possibility, especially as such societies become supply-zone peripheries of the larger central states. The extension of this kind of argument to the Pacific generated the suggestion that Western Polynesian political orders, best represented by Tonga, could become, in the absence of external trade, more like Hawaii (Friedman 1981). In such cases, diarchies would be transformed into *monarchies*, where an opposition or division between religious and political leadership became a single theocratic order in which political power encompassed religious order and where warfare became a dominant mode of relations among competing social units. It might even be suggested that such political orders tend ultimately toward violent involution in which individual polities become increasingly smaller in scale.

As understood in this volume, the emergence of commercial-bureaucratic civilizations is the product of the transformation of previous "global" systemic processes. This historical trajectory is not well documented in terms of actual trajectories, but there is a great deal of material on the mechanisms that might be involved (Friedman and Rowlands 1977). The centralization of the polities involved is already present, but the emergence of merchants and a merchant class, of some form of abstract wealth that is exchangeable for products, people, and land, and the specialization of production linked to the export of manufactured goods are all aspects of this transformation. However, the most significant phenomenon, well documented and analyzed in this volume, is the formation of a center-periphery system of relations where some areas become supply zones for raw materials and people for the emerging center that, in turn, supplies peripheral elites with centrally manufactured prestige goods or luxury goods. Many years ago, it was suggested that the space of global systems could be mapped as a network of different functional components.

The components are not independent units that relate to one another by exchange or other forms of transfer, but functional positions within a larger complex system in which they are configured. The issue of trade in such systems is a variable expression of the more constant phenomenon of "transfer," which can occur as a political mandate as well as a commercial exchange. There is often a continuum of such variable forms, that is commercial trade, gift exchange, and tribute, the latter being entirely nonreciprocal unless such services as "protection" are included. Egypt is often used as an example of internalized center-periphery relations, while Mesopotamia is the classical commercial model of what is closer to modern capitalism. The existence of transfer is crucial, and the latter, commercial model is very unequal and best described as "imperial." Imperial, in turn, implies military power that is ubiquitous in all such systems. What is referred to as "civilization" is, then, coterminous with imperialism. The provided model (Figure 20.1) is somewhat more complex than our description. It comprises centers that maintain commercial



20.1. Regional structure of global system (Friedman 1994: 24).

exchange relationships, and often gift relations as well, between rulers. Centers are surrounded by a number of peripheries and subperipheries. The fundamental center-periphery relation is one between centers and supply zone peripheries. The latter export raw materials and people (labor) in exchange for manufactured goods, especially prestige goods, from the centers. The peripheral zone also contains trade states that may link centers, as well as centers and supply zone peripheries.

Functionally, such states or semistates can develop into centers in the right conditions. Ancient Greece offers important examples of this type of development. There is a third more external zone that contains both expansionist predatory structures that exact tribute from the larger system at crucial geographic points and may even attempt conquest of the larger centers, and populations that have escaped or try to escape the power of the centers. The latter would seem to be the ideal type of populations described by Scott (2009) that escape the power of the state. Some of these populations, often egalitarian and living in small communities, fit his description, but many of his examples reveal expansionist projects of their own with marked degrees of hierarchy, and are thus closer to the predatory structures referred to previously. Zones such as the so-called *Zomia* in Southeast Asia corresponded to areas that lay beyond the direct control of central states, but they did not necessarily correspond to populations that engaged in the "art of not being governed" (Friedman 2012), not unless it was not being governed by other states. This anarchist representation may assume that the absence of the imperial state implies an egalitarian strategy, but this is not a

necessary relation by any means. The external zone may often be relatively free, of course, unless the imperial states are on the hunt for people and raw materials. As presented in Figure 20.1, the combination of "primitive" and expansionist structures appears a more adequate depiction of this zone in the larger system. It should be noted as well that peripheries are not to be equated with poverty even if they are relatively underdeveloped with respect to centers. Peripheries often support wealthy elites who indulge in no small way in the luxuries of "civilization."

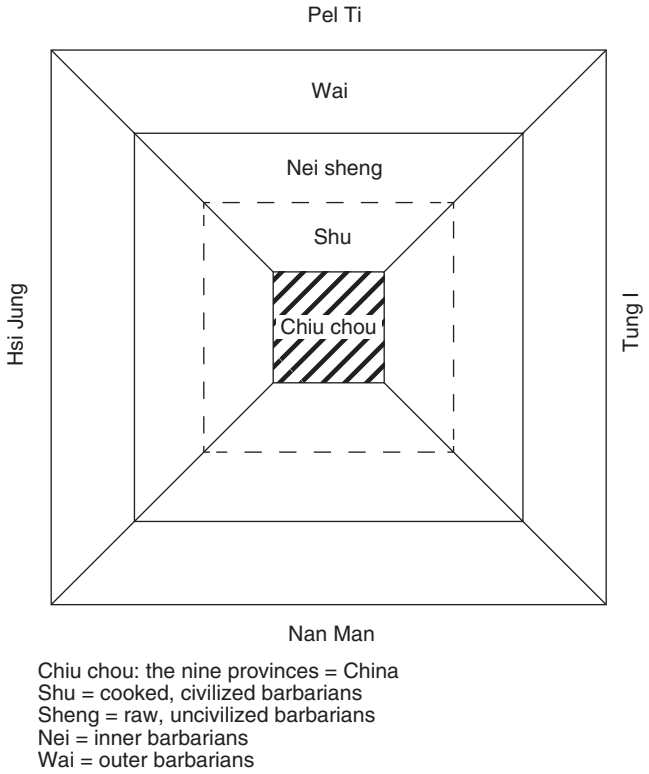
If the transformation that generates "civilization" includes these different zones, then it is possible to understand different social orders or structures as components of the larger system. Although central states tend to be commercialized, and are often quite capitalist in their organization, there are also bureaucratic states in which merchants are reduced to functionaries, and there is a common tendency for historical fluctuation between these forms of organization. If the supply zone periphery is often organized as a hierarchical political order in which prestige goods monopolized by centrally placed chiefs or kings are strongly connected to an exchange in which local raw materials and people (labor) move toward the center, then manufactured prestige goods become the main means of circulation or alternatively a main source of wealth in the periphery. There is thus a structural family resemblance between the prestige-good polities common in peripheral areas and feudalism, as well as more recent peripheries discussed in classical dependency theory. Supply zones can also be zones of plunder, and, of course, in such cases the social orders are greatly reduced, often to small refugee populations that resemble the more anarchist model suggested by Scott.

Trade states in the ancient and more modern world systems are intermediary polities that often position themselves between larger central states. As such, they are dependent on the latter production areas, and even on the relations between peripheral zones and the central states. Their position as semiperipheral indicates their potential promotion to major centers of production and imperial expansion. Athens demonstrates such a trajectory, and the commercial cities of Italy and, more recently, Singapore are typical examples of the potential power of such intermediary positions. Nomadic trading populations occupy a position similar to trade states although more rudimentary in their organization. Rowton (1973a, 1973b, 1974, 1976) has argued that the nomad is a pole in a larger fluctuation, the other end of which is urban state formation based on monopoly over larger trade networks (see Kristiansen in this volume). The role of nomadism as mediator in long-distance trade has often been noted, but the existence of such groups is very much anchored, so to speak, in their systemic position in between centers and their recruitment from peripheral zones of the imperial order. In functional terms, nomads and merchants, with or without the existence of trading states, do similar kinds of things in the larger political economic field.

In this perspective, civilization is coterminous with imperial world orders. It is within the latter that a global division of labor is constituted. The mercantile character of the political economy is a common feature of the emergence of civilization in areas where regional monopolies are difficult to maintain. Mesopotamia, as well as Europe, exhibit this decentralized situation that leads to the competition that is so dynamic in their developments, founded as it is on the decentralized nature of the accumulation process. Where such competition does not exist or can be eliminated, centralized bureaucratic political economies can become a structure of the *longue durée* as in Egypt, or as a recurrent phenomenon in the histories of Mesopotamia and even of China, where periods of centralized empire are periodically replaced by a more decentralized geographical pattern, where bureaucrats are replaced by or transformed into merchants. But whether centralized or decentralized, the imperial logic of civilization remains. This also implies that trade can be replaced by tribute and even combined with it. Thus, it is not the nature of the transfer that is at issue but, instead, center-periphery differentiation.

The general argument of this book is that trade, or its equivalents in terms of transfers, is crucial to the existence of civilization, which is to say that civilizations are always imperial organizations. In addition, the transfers are not part of a mere static network. They are driven by expansion and accumulation, not as a mere product of the greed of rulers and merchants but as a logical necessity of imperialism. The fundamental condition of competition in which stability can only be reached by the introduction of a perfectly ordered structure of control is the basis of the accumulation process. This is the secret that was understood so well by Rosa Luxemburg (1951), in which, at least for capitalism, an external zone is always a condition for the maintenance of accumulation. Without it, internal competition leads to self-cannibalization, a massive race to the bottom. In fact, this is what happens when imperial expansion reaches its external limits. It is interesting that Luxemburg referred to this form of cannibalism as "barbarism" (Luxemburg 1951). In almost all cases, it includes internal conflicts surrounding a declining economy and external "invasions." If we find ourselves in such a situation today, we have good cause to consider contemporary conditions in light of this longer-term pattern. Might this be applicable to the so-called collapse of the Bronze Age, which occurred almost simultaneously in the Aegean, the Middle East, and Egypt (Ekholm Friedman 2008)?

Globalization is one of the most popular terms being used today to characterize the wide geographical extension of ancient world systems. This new and quite vast literature has sought to apply a global perspective to the ancient world, and it has led to a number of debates concerning the antiquity of globalization or globalizations (i.e., Jennings 2011). The problem with much of this literature is that the term *globalization* seems to include everything from the



20.2. Chinese Model of "world structure" (Warring States Period) from Müller (1980: 63); Friedman (1994: 64).

existence of a global field of interaction to the more systemic properties of such fields without really distinguishing between them. Thus, the existence of connectivity says virtually nothing about the nature of that connectivity. The global systemic approach used by a number of researchers, including those in this volume, is concerned with such specific properties. In this approach, globalization, as it was understood as early as in the work of Braudel (1968, 1977; Wallerstein 1991b), is a phase phenomenon related to the decline of centers, the decentralization of wealth accumulation, and, even, the rise of new centers. Thus, the formation of a colonial world and the existence of center-periphery relations are not equivalent to globalization except in a quite superficial sense of being "global." In this sense, the antiquity of globalization or globalizations is a product of the antiquity of global systems. The mapping of global relations from antiquity to the present is a major and crucial project in demonstrating the validity of a perspective that has increasingly gained acceptance as the result of empirical research. Figure 20.2 exemplifies an early Chinese parallel to the modern era's mapping of the imperial world in which there is a clear scalar differentiation between center and periphery.

The chapters in this volume document and analyze what might be called the geographical parameters of civilization and trade, clearly demonstrating the degree to which large-scale fields of exchange are the foundation for the emergence of civilizational systems. These systems are based on a vast division of labor in which centers accumulate the different products of the larger area, and where raw materials and labor move toward the centers "in exchange" for manufactured goods, but at the same time, where gift exchange among central powers is politically critical. In the midst all of these trading activities, military power plays the most significant role in the formation and maintenance of imperial relations. The huge construction projects that are the hallmark of most imperial civilizations are almost always dependent on the resources of an area much larger than the center. The identity of central powers is indeed often tantamount to the accumulation of *difference*, with products and people being the foremost. In this respect, it is noteworthy that the history of cultural accumulation in the form of museums began as treasures to be displayed for clients of central powers (Pomian 1978). Prestigious goods but not prestige goods, such treasures were an expression rather than a means to power. They were the representation of the extent of geographical control. The riches of civilization in all their diversity are the products of imperial order and its capacity to centralize the accumulation of the diversity under its direct control, as well the social field of its total exchanges.

IMPERIAL CULTURES AND IDENTITIES

Whether there is an emergent global culture in the processes referred to in the preceding text is a major topic of current and future research. Evidence for larger cultural projects are certainly evident from later periods, that is during the period of Hellenistic expansion in which a stratified structure with Greek colonials, Hellenized local elites and an imposition of Greek culture in the form of education into the Paideia, and the establishment of a lingua franca, the *koine,* are clearly globalized cultural phenomena. Elite cultures seem to have existed in all imperial worlds. The socialization of the dominated world and its self-identification have often been a major project of central elites. Cosmopolitan identities associated with imperial worlds have been documented, even if not systematically, and this is clearly not always easy to do in the context of ancient history and archaeology.

However, there is a particularly salient and repeated perspective on the world that emerges in most civilizations: a differentiation between a civilized center and its surroundings, which are increasingly uncivilized peripheral regions. The word for *slave* in Early Dynastic Mesopotamia was "hill man." The warring states of pre-Han China divided up the world into a series of zones that are surprisingly similar to our own and that extended from the civilized

world to the *wai* or "outer barbarians." There is even a model of assimilation built into this particular model where the outer populations can by and large become "Han" by adapting and internalizing Chinese culture. This model is clearly an elaboration on imperial rule translated into a sociocultural space. The Classical Greeks were, of course, known for a similarly hierarchical view of the world, and the later Arab empires had their geographers who mapped out the hierarchical concentric distribution of peoples of the world. It is noteworthy that the emergence of evolutionary schemes were related to the transformation of a spatial hierarchy into a temporal one, where the *out there* is equated with the *back then*, a transformation that seems to correlate with the deepening of commercial civilization, the disintegration of what Dumont would call holistic orders, and the emergence of an ideology based increasingly on social mobility, represented in the formation of something akin to a dominant bourgeoisie, owing its social position to accumulated wealth rather than aristocratic inheritance.

The other concomitant feature of civilizational cultures is the tendency to accumulate objects from the entire global system that become part of the treasure and, later, treasury of the center. The insightful work by Krystof Pomian (1978, 1990) demonstrates the lineage of the museum, from ancient forms of collection of prestigious goods taken out of circulation for the purposes of display. The treasuries of ancient city-states were stores of wealth that were even put back into circulation in periods of crisis. The wealth represented reflected the extent of the power of the center. Treasures could become treasuries when part of the state, or they could remain in private collections belonging to aristocrats. The link between prestige goods systems, in which the goods are monopolized at nodal points in wide networks of circulation, and commercially-based states, in which the goods represented the wealth and prestige of the ruler without being means of circulation, is central to Pomian's argument. Thus, prestige goods are a means of circulation that define social position. As treasuries, they symbolize the wealth and geographical reach of the center. They may indeed be convertible as they often are in times of war when liquid wealth is needed to pay for military expeditions. The role of trade, exchange, warfare, and tribute is crucial in such accumulations of wealth and is markedly different from the ritual centrality of sacred shrines. The fact that shrines are the historical precursors of museums is quite logical as they are essentially elaborations on the display of accumulated objects from the entire imperial field, the larger arena of civilization. It is noteworthy that the distribution of prestigious versus prestige goods is an expression of the differentiation between commercial centers and peripheral zones, where relatively low-valued goods produced in the center, often on a larger scale, are exchanged in the periphery for local products and raw materials. The former function as prestige goods, while, in

the center, the goods kept in the treasuries of the wealthy are not destined for circulation but rather display.

CONCLUSION

Is "civilization" coterminous with trade or exchange more generally? This book argues cogently for this interpretation even if hierarchical social orders per se do not necessarily depend on systems of external exchange for their emergence. Hierarchy is not equivalent to the large-scale operations associated with civilization. In either case, the issue of civilization remains, and asserting the essential role of trade in a larger regional perspective puts the studies on firm ground. As a perspective on world history, the approach featured in this book highlights the centrality of external relations in the formation and reproduction of civilization with all of its internal contradictions, expansions, contractions, and declines. These processes can even be understood as systemic consequences of the nature of systems based on external exchange. Furthermore, assuming that such a perspective is entertained in the future, this book would have served a vital purpose and be understood as a truly crucial contribution to our understanding of world history.

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